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THE BOOK OF GARDENS
AND GARDENING



Country Life Print

From a painting by William F. Curtis

Some one has called phlox "the garden's most gorgeous child," and certainly in its diversity of form and coloring this familiar friend is well described thus



THE BOOK OF GARDENS AND GARDENING



EDITED BY
REGINALD T. TOWNSEND

EDITOR OF "COUNTRY LIFE"



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FOREWORD

"Another book about gardens!" Yes, indeed, because the craving to know more about gardens, to become familiar with them in their inner significance in relation to our everyday goings and comings is a growing more insistent demand. The lover of gardens feeds upon the creations of that affection and next to exercising ourselves in our own gardens we feel a gleesome happiness in visiting gardens made by others—visiting through the camera and seeing them in pictured reproduction. Nor is this a purely idle pastime for in the heat of our own homes we can with stately leisure and facile imagination build up new gardens for ourselves from the inspiration and suggestion derived from those others. Visiting gardens by proxy has ever been a right to the real gardener who finds in it an opportunity to give vent to his own imaginative desires in interpreting the pictures. It is a pleasant and intellectual recreation.

Thus looking at the picture, the armchair visitor can replant in his own choice of material what he sees before him, translating and interpreting the materials of the pictured garden in the terms of his own pet plants and fancy flowers. Many a good garden has been started by such absent study and reconstruction. And as the world wags on we more and more come to understand that the delightful pleasing philosophy of that sixteenth century savant whose oft-quoted words, though sometimes hackneyed are never banal. Farseeing indeed was he in that *Essay on Gardens* when he referred to the art as the "greatest refreshment to the spirits of man; without which buildings and palaces are but handyworks."

It is in this attitude toward gardening that this collection of various types of gardens will appeal. Beautifully presented to please the eye are accompanied by facile, practical details of construction that will only lend to a better understanding of garden making. This collection of gardens is neither typical nor special, merely a gathering together of certain gardens that appeal through pure beauty and charm or by a practical demonstration of some peculiarly troublesome problem triumphantly solved. There can be no universal plan adapted bodily to any garden and although many plans may be made to fit any one given spot, still there is only one such plan that will be fully expressive of the personalities and individualities of the owner.

The garden must ever be a personal thing, if it is to have reality. And so the garden lover may draw inspiration and also practical instruction from these pages both of which will be readapted to fit a personal and peculiar problem that is his own.

LEONARD BARRON.

Editor, "Garden Magazine."



CONTENTS



	PAGE		PAGE
The A B C of Gardening	1	June in the Garden of Paul D. Cravath, Esq.	55
<i>Adolph Kruhm</i>			
Planting for the Small Plot	3	The Placing of Garden Sculpture	57
<i>Elsa Rehmann</i>		<i>Rena Tucker Kohlman</i>	
Iris in the Garden of J. A. Haskell, Esq.	4	The Intimate Garden of Elsie de Wolfe	60
Some Things to Know Before Planting a Garden	5	Annuals for the Garden	64
<i>Isabella Pendleton</i>		<i>H. Stuart Orloff</i>	
The Magic of Water in the Garden	8	Foundation Planting That Adds to the Beauty and Value of the Home	66
Must-Haves for the Flower Garden	11	A Garden of Pictures	68
<i>Florence Taft Eaton</i>		<i>Rose Greeley</i>	
Cutting Garden Costs.	14	A Perfect Intimate Garden	71
<i>Fletcher Steele</i>			
The Year 'Round in a California Garden	16	The Garden Gate that Charms by Its Simplicity	74
The Topiarist Shows his Skill	18	<i>Eloise Roorbach</i>	
Desert Flowers that Bloom in the Spring	20	Garden Wall and Steps	76
Essential Tools for the Garden	21	Bulbs that Bloom Indoors	77
<i>Adolph Kruhm</i>		<i>Mary Harrod Northend</i>	
Making the Most of Half an Acre	23	A Bit of Japan in America	79
<i>Amelia Leavitt Hill</i>		Native Shrubs for Small Gardens	81
Wall Fountains and Dipping Pools	26	<i>H. Stuart Orloff</i>	
Beautifying the House by Planting	28	Blending an Estate with the Landscape	83
The Rock Garden of F. Cleveland Morgan, Esq.	30	The Gardens at Cliveden	86
The Chrysanthemum—the Perfect Fall Flower	32	Summer Indoors all Winter	88
<i>Carl Stanton</i>		<i>Florence Taft Eaton</i>	
The Gardens of Our Grandmothers	35	House and Garden of Jessie Willcox Smith	90
<i>H. Stuart Orloff</i>		Wonder Gardens of the Canadian West	92
A Garden of Classic Design	37	<i>Julia W. Henshaw</i>	
A Hanging Garden of Modern Babylon	40	June Time is Rhododendron Time	96
Does the Small Vegetable Garden Pay?	41	Two Good Examples of Garden Design and Planting	98
<i>Adolph Kruhm</i>		<i>Isabella Pendleton</i>	
California Boasts this Dainty Japanese House and Garden	44	Plant Your Bulbs in the Fall for Spring	100
A Garden of Sunshine and Shadow	47	<i>H. Stuart Orloff</i>	
Spring Planting for Fall Blooming	50	The Way of an Orchid	103
The Home for a Greedy Person	53	A New World House in an Old World Garden	104
<i>Sophie Kerr</i>		<i>R. Clipston Sturgis</i>	

THE BOOK OF GARDENS
AND GARDENING

The A B C of GARDENING

By
ADOLPH KRUHM



Long handled tooth cultivator is ideal for reaching inaccessible parts of beds or borders

SUPPOSING that you have never had the chance or time to make a garden and the opportunity suddenly confronts you, how would you go about it? Comparatively simple instructions serve the initiated, but the beginner needs more intimate hints to guide him. This article is intended for the man or woman who never handled a spade or digging fork, and who needs more intimate hints to guide him.

To start a garden, you'll need certain tools, such as a spade, fork, rake, and hoe, and plants. You must dig, rake, and cultivate plants, and irrigate. The most important factor is that of cultivation, which largely determines the amount and quality of the crop. There is an easy way and a hard way of doing all these things. Take the case of digging, for instance. To dig heavy clay with a spade is unnecessary hardship. A fork on sandy or any light soil means less work is not done correctly, for too much soil will fall through the tines of the fork and the gardener has a chance properly to mix the surface with the subsoil.

As to the matter of sowing seeds; with any seeds except lawn grass, the beginner is likely to sow them too thick. The result usually is a row chock full of seedlings, which the law of the survival of the fittest, and few indeed develop properly without the aid of the gardener.

The first thing deserving consideration is soil preparation. Almost any soil holds the elements necessary to plant growth, but all soils are improved by liberal additions of humus—decayed leaves, straw, or manure. Well-rotted manure is largely the best. Where that is not available the commercial fertilizer may be pressed into service. Dig into the soil, scatter commercial humus on the surface. Dig deeply and rake well. Deep watering brings to the surface hitherto unused moisture. Thorough raking will make for easy work throughout the season.

When it comes to the making of rows. The beginner gets them crooked because he does not use a garden reel and line superfluously. It is a mistake to be paid for a hundred-fold increase of the season. Not only does a crooked row look slovenly appearance of the garden, but it makes cultivation a trying task during the season. Every time the cultivator "bites" into the soil it cuts the crop and hurts the gardener. Make straight rows and get them deep or not too deep—according to the seeds or crops we grow.

Now ready to order the material that is entrusted to the soil. Right here let me warn the beginner is all too apt to take this phase very little thought. In most cases the selection of varieties is left to somebody

else. But neither the clerk at the seed store nor the hired gardener knows as well what you want as you do, after a little study of a few catalogues or a good book on the subject.

Supposing we start our garden right by deciding not to buy cheap seeds at a grocery or hardware store, nor to pick up plants and bulbs at bargain sales, but to go to specialists in seed and plant production and to pay their price. We now have safeguarded the ultimate success in so far as it is humanly possible and are ready to sow seeds.

As in a well-regulated business, so in gardening, he who would be successful must do things on time. Not only is it necessary to pay attention to the seasons, but to the days and even hours within days. For instance, never set out plants of any kind in the morning of a sunny day, unless you provide shade. Nothing is more trying to newly transplanted seedlings than the merciless rays of a warm summer sun. After 6 P. M. is the best time to set out plants, and preferably after a shower. Lack of moisture in the soil should always be remedied by prompt irrigation.

As to the time to sow seeds, bear in mind the fundamental rule that the harder the plant you desire to raise, the earlier the seeds may be sown. Thus, among flowers, such hardy annuals as poppy, phlox, and centaurea, and of course all hardy perennial seeds, may be sown as early in the spring as the ground can be dug and raked properly. With the majority of flower seeds



The garden should have a thorough soaking—not sprinkling—on an average of once a week



One of the many types of cutting implements that are indispensable in the garden

however, it pays to wait until the soil has become somewhat warmer, say about May 15th, in the latitude of New York. Aster seeds especially are apt to rot very quickly in wet, cold soil.

Generally speaking, seeds should not be covered any deeper than is necessary to make them "stay put." The exceptions to this are certain vegetable seeds, the plants of which should be well anchored to prevent winds from blowing them out of the ground. Beans, corn, and peas should be covered with two or three inches of soil. The same holds true of some flowers, like sweet peas, nasturtiums, ricinus, castor-oil beans, or any coarse-seeded flowers. The principle to be borne in mind is that the larger and taller the plants will be, the more securely should the seeds be placed so as to root deeply and stay firmly.

Flowering bulbs should be set out when the weather has become sufficiently settled to make safe the sowing of such tender vegetable seeds as beans and corn. Gladiolus, cannas, dahlias, etc., are all as susceptible to frost as are tomato plants. From May 20th to Decoration Day is generally early enough to make plantings of all the above, except farther south. A convenient method of reckoning is to start a week sooner for every hundred miles of latitude south. Philadelphia is about 100 miles south of New York, hence work may be started a week sooner.

The rule that should govern as to spacing and transplanting is to give every plant sufficient room for proper development. Of course, circumstances alter cases. A branching aster that will spread to cover a space up to three feet in diameter in good soil, will not do as well in poor soil. A cabbage plant of the variety Jersey Wakefield requires only half the space necessary for a Copenhagen Market. As in other activities, the gardener will learn by experience, but this being a slow and expensive process, let us arbitrarily agree to give each flower or vegetable that does not make a large top growth a minimum of four inches of space in row or bed, and larger ones from six to twelve inches. For illustration, the little French marigold is well satisfied with four inches of space in a row, while its tall African brother should have a foot or more in which to spread. Among vegetables, all root crops (carrots, beets, radishes) thrive within three to four inches, while bush beans, celery, lettuce, etc., do better standing from six inches to two feet apart, depending entirely on the character of different varieties.

AFTER the seeding and planting and transplanting come the pleasant tasks of weeding, cultivating, and watering. I call them "pleasant," for many of the real thrills in gardening are experienced only by him who comes into intimate

contact with the soil and the plants. Frequently the gardener comes across new types standing for unexpected variations from the old type. And if the "finds" do not always turn out to be of permanent value, there still remains the pleasure of having had an insight into an age-old wonder—nature in an experimental mood.

Much of the inconvenience incidental to stooping while cultivating has been removed by the introduction of tools designed to do specific tasks. Long-handled weeders of both the tooth type and with rocker blades make cultivating truly a pleasant pastime. On general principles, most cultivating is strenuous only because the gardener attempts to go too deeply or to cover too much ground in a short time. Most weeds are shallow rooters. Those that aren't (dandelion, dock, etc.) should be removed with a digging tool rather than a cutting instrument.

The question is raised frequently: "Which is more important—cultivation or watering?" The answer is: "Both are necessary, at the proper time." Plant life needs air as much as moisture. But it can get along without water for an amazing period of time if the moisture within the soil is preserved by the creation of a so-called "dust mulch" through frequent cultivation. The garden should have a good soaking on an average of once a week. Frequent sprinkling is more injurious than beneficial because it trains the roots of the plants to go *up* for moisture, instead of *down*, as they should. Discretion should be exercised in the manner of watering. For instance, while leafy flowers and vegetables such as cannas, dahlias, lettuce, cabbage, etc., positively revel in being soaked, many flowers are spoiled by having the hose turned on the plant rather than on the soil.

Almost simultaneously with the arrival of plant life in the garden, animal life makes its appearance. Some sage has said that there is a bug for every plant and in many cases there are more than one variety for the different plants. Unless the gardener is willing to share the fruits of his efforts with various insects he must begin to combat them as soon as they appear.

Briefly, insect pests may be divided into two broad classes: those that chew the leaves, and those that suck the juice of the plants. Of the two, the latter are the more nefarious, because it requires a bodily contact poison to kill them. Arsenate of lead, Paris green, and other poisons are used to counteract the ravages of the leaf-chewing insects; plant lice and others thriving on the juice of the plants may be combated by the use of various nicotine preparations and other contact insecticides.



The type of duster frequently used to check leaf-eating insects

The fight against bugs may be carried on through either spraying or dusting machinery. Arsenate of lead and various other remedies to fight leaf-chewing insects are generally applied to the foliage with a dusting can having a perforated bottom. Liquids are generally applied through air-pressure spray pumps.

And yet another phase of cultivation requires our attention, namely pruning. The old adage, "Spare the rod and spoil the child" in terms of garden lore might be made to read, "Spare the pruning shears and spoil the plant." Pruning primarily was intended to keep certain plants within bounds, and to thin out superfluous branches. The seasoned gardener, however, looks upon pruning as a most important factor designed to turn the plant's energies into proper channels. Sympathy greatly interferes in the rose garden. Few rose gardens are pruned severely enough. In many instances, hardy perennial flowers will yield a second crop of flowers if the first stalks are removed before the flowers begin to fade. Many vegetables, the tomato especially, will respond marvelously to pruning. By reducing the plant to three of the healthiest stalks, and providing stakes or other supports, the yield in many instances may be doubled.

ONE of the invariable rules in the garden should be never to plant the same crop twice in the same row. This not only holds good for one season, but for a series of years. Of course, in the home garden, where fertility is maintained at a high rate, an occasional disregard of this rule generally does not bear dire consequences. But the seasoned gardener will watch carefully that beans do not follow beans, that members of the cabbage tribe are not allowed to follow each other in succession. Related flowers and vegetables are subject to attack by the same insect enemies and fungous diseases. One sure way to keep the garden in a healthy state is to rotate the crops year after year, and the best way to accomplish this is to make a regular plan on paper at the beginning of the season, or better still to provide a set of plans. The first plan becomes operative from early in the spring. The second plan should be made along July 1st, when many of the first rows become available for successive crops. A third plan should be made where fall planting ushers in the real opening of next season's garden endeavors.

"Just what would you recommend for the beginner's garden in the way of easily grown flowers and vegetables?" is a question which I have had to answer scores of times. It all de-

pends upon the inclination and instinct of the gardener, of course. Here is a list of flowers which, if sown any time after May in the same fashion as the finer vegetable seeds, should not fail to provide a fair measure of reward for a little labor and at small cost. Confining my recommendations to annuals, I cause the raising of perennials from seed to require a great deal more patience than the average beginning gardener is willing to exercise: a celosias; centaureas; cosmos; daisies; larkspur; marigolds; nasturtiums; pansies; phlox; peas; verbenas; zinnias.

Since the choice of varieties in vegetables is very much more complicated, I am adding a few recommendations as to varieties.

Beans, Dwarf or Bush: Bountiful—early podded. Stringless Refugee—late green podded. Sure Crop Wax—early yellow podded. Ho-Wax—late yellow podded; should be picked while quite young.

Sweet Corn: Early Malakoff and Peep of the East—very early white, of rather indifferent quality. Golden Bantam—second early yellow, of superior quality. Seymour's Sweet Orange, Cob of the Gentleman, and Golden Evergreen—late season, fair quality.

Peas: Market Surprise—very early. Marvel—sweet, but small. Thomas Laxton—very sweet, second early. Alderman—tall, of fine quality.

Radishes: Rapid Red and Scarlet Globe—early small round sorts. White Icicle, Scarlet Short Top, and Chartist—good, midseason sorts.

Lettuce, heading varieties: Black Seed Tenderheart, Black Seed Big Boston, May King, Tenderheart—very early butterheads. Iceberg and Wonderful—midseason and late crisp. King of Spades—late. Chalk's Early Jewel—the best of Romaine type.

Tomatoes: Early Avon, Livingston's Globe, Chalk's Early Jewel—best for early crops. Matchless, and Coreless—best for late crops.

Cabbage: Early Jersey Wakefield and Copenhagen Market—special early sorts. Sutton's and Danish Ballhead—good winter keepers.

Kohlrabi: Early White Vienna—far superior to turnips for summer use.

Turnips: Purple Top Strap Leaf for early use. Amer. Purple Top for late use.

Beets: Crosby's Egyptian and Early Wonder for early. Early Model—for midseason. Crimson Globe—late.

Endive: Moss Curled, for mixed salads.

Carrots: Amsterdam Forcing and Chantrelle or Model—for early. Danvers Half Long and Sutton's Intermediate—for late.



For tall shrubs and trees the knapsack spray pump does the work effectively



A scratch weeder that does the work with little expenditure of effort, because of its light weight

PLANTING for the SMALL PLOT

By ELSA REHMANN

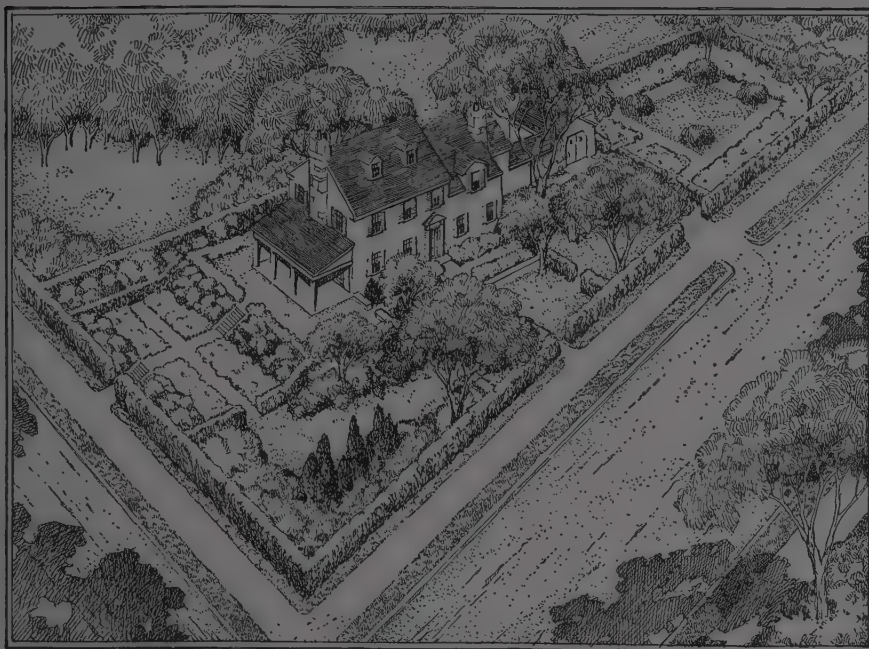
THE handling of the small plot illustrated here, the style and character of the house, disposition of the rooms, size and shape and position of the plot, and contour of the land influenced the development of the grounds and determined its subdivision. There is a dooryard, terrace, a lawn, a flower garden, a service section, a cutting garden, all neatly and compactly arranged within a high engaging privet hedge. Every inch of ground was well used; every part was as intimate and cozy as possible; every tree and shrub, every flower and bush was chosen and placed for its special appropriateness for its situation.

The house suggested the plan of a little hedged-in garden, so simple in its only ornaments are pink-flowering dogwoods that silhouette their trailing outlines against the white green-shut-house.

The slight change in level made possible the bit of terrace along the front of the house. Over the dry-laid retaining wall evonymous, English ivy, a Silver Moon rose, a polygonum, and a clematis trail. Broad bands of pachysandra and the broken stone pavement, with four pink-flowered evergreen *Azalea indica alba* at the corners as accents. For spring effect a hundred more *Narcissus poeticus* are planted in clumps and there, while for summer and autumn color and pink verbenas all intermingled can along the edges of the path.

The lawn is a tiny place, not fifty feet square. Plants had to be carefully chosen so that they did not overpower it. Their ultimate height, form, even the size and texture of their leaves, had to be considered from this viewpoint. For this reason, quite aside from their flower color, cotoneasters and abelias, Harrison roses, and *Spirea prunifolia*—the 'bridal-train'—were chosen for the sloping ground below the terrace, and Persian lilacs were selected to form a border inside the privet hedge. There are a few other plants, of course. A group of arbutus, with laurels as a kind of base, formed the terminus for a little vista to the flower garden. In its semicircle there is a low bird bowl or even a seat. Two yew trees, whose large solid leaves are interesting for very contrast, flank the entrance to the garden, and two *Callicarpa purpurea*, chosen for their interesting lavender jewel-fruit, are at the opening of the dooryard. The crab-apple is placed at the entrance of the garden is there not only for its lovely flower effectiveness but also that it might prove useful in growing pleasant shadows in masking the house porch with its foliage.

Every tree on the ground has its own usefulness. The horn—*Crataegus coccinea*—in the corner of the lawn near the hedge and its companion in the hedge in the service garden are there to heighten the interest of the street



A bird's-eye view, showing the general effect of the house in its setting

view by their silhouettes and foliage masses as they show over the hedge. The two trees in back of the house and the tree at the service entrance are in strategic positions, because any little suggestion of wooded background to a house and of coziness that a house can get from trees nestling close to it or from branches spreading over its roof, is welcome on a small lot.

THE slopes between which the garden lies gave an interesting opportunity for the use of trailing shrubs. *Forsythia suspensa*, *Rosa Hugonis*, *Rosa multiflora*, and buddleias like recumbent growth over slopes and banks. Forsythia is of course always welcome for its very early bloom; buddleias are by now old favorites, *Rosa Hugonis* has all manner of promises; and *Rosa multiflora* is especially interesting for its charming winter berry clusters. Honeysuckle and matrimony vines build themselves into mounds of foliage; *Rosa Wichuraiana* loves to trail down slopes; akebia, bittersweet, rose Dr. Van Fleet, and turquoise berry vine can be interplanted to advantage as beautiful naturalistic copings to edge rough stone steps.

Above the slope is a grass terrace all around the living porch. It is hedged with scotch roses—*Rosa spinosissima*—whose fragrance, lovely single white flowers, and tiny compact foliage make them ideal for such use.

The garden itself takes its coloring from that of the living room—lavender, blue, and rose it was to be. To be sure there had to be some yellow daffodils—large Emperors and small cupped

orange-rimmed *Barii conspicuus*—close clustered around the four peony bushes that are at the intersection of the paths. With the tulips, however, the real coloring of the garden begins. There are bright rose-pink Clara Butt, purple Viking, deep rose Baron de la Tonnaye, slaty-blue Ronald Gunn, heliotrope Dream, and black Tulip Noire—sometimes twenty-five, sometimes fifty, sometimes a hundred tulips of a kind—planted in little drifts. The peonies are soft pink Mme. Calot, with little clusters of pink polyantha roses in front of them. For an early effect there are irises in lavender and blue shades, early pink phloxes, and stokesia, the blue perennial cornflower. For a later effect, there are blue *Eupatorium caelestinum*, heliotrope, rose and flesh-colored zinnias, and blue perennial asters.

And then there are all manner of little plants intermingled trailing over the edges of the path—*Phlox divaricata* and lavender-blue pansies, nepeta and ageratum, amaria and pinks.

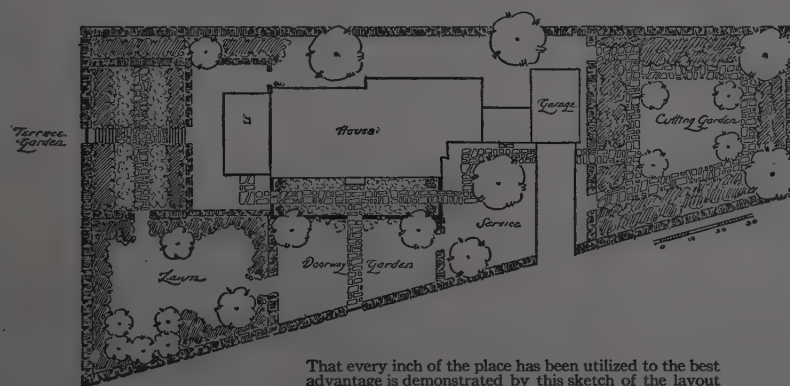
It is interesting to limit the flower color for such a tiny garden; and it is interesting to keep all the flowers comparatively low so that the garden will seem to nestle into its position midway up the slope.

Steps lead all the way from the house terrace to the street, with a gate to break the hedge line. It is pleasant to be able to enter the house through this colorful way for a bit of a neighborly visit; it is pleasant to be able to leave the house through the garden when it is a short cut to the station not far away.

THE cutting garden could be made just as interesting a spot as the flower garden. Two apple trees stand in the farther corners and four quince trees in the centre. The borders are for roses and sweet-smelling herbs, for rhubarb and lettuce, for parsley and carrots. They are for all kinds of annuals and for all kinds of sturdy growing perennials too big for the little flower garden, for heleniums and luxuriant hollyhocks and splendid sunflowers.

Just as the little flower garden must be kept in some kind of trim order—simple as it is—this cutting garden, all shut in, can be cared for or neglected, can be trimly in order or rampant with growth, as you will.

There are various openings in the hedge that divides the cutting garden from the rest of the grounds, so that you can look into it and enter it from various points. You can have a charming view of it from midway up the entrance walk. These little ways of entrance and exit are very important on any place, perhaps more especially on such a very small place, and the opportunity of walking all around the place, from section to section, without ever once retracing steps is particularly happy.



That every inch of the place has been utilized to the best advantage is demonstrated by this sketch of the layout





Photograph by Harry G. Heath

A broad sweep of any flower in bloom — especially in spring — is inspiring, but the winged bracts of the iris seem to give to its masses a spiritual quality peculiar to this flower. In the garden of Mr. J. A. Haskell, at Redbank, N. J.

THE THINGS PLANTING

RAFTSMAN of the good old type, the Leonardo da Vinci kind, told me not long ago that the reason we have so little art in America is because everything is done in too much of a hurry; the beauty created rapidly, he argued. There is truth in this. A Chinese artist works on his canvas; he excels because of the fineness of the minute details of his painting. The art in literature is not dashed off in a few minutes but is an outgrowth of years of patient work. The famous hydraulic displays in the gardens were evolved only after years of study by Moorish artists, who were not satisfied with a hose nozzle fastened up in the centre of a garden. They wanted beautiful fountains and with water forms until the image desired was triumphant in the air; the sound of the water as it fell back into the pool was a pleasant surprise for lovers as they sat near by in the shade under the blossoming orange tree. To create a garden at all comparable to the old Italian masterpieces, much time and effort must be spent on its development. Detail is one of the important parts of a garden. It comprises four main considerations—mass, texture, and color. Height is even enough study. An architect realizes that planting enhances the beauty of his work. It is a good plan to photograph the garden before any planting has been done. Study the garden in a big way, and decide where the tall trees would look best. Draw them in on the plan. The intermediate heights should be placed, and so on down to the lowest. Emphasize your low roof line, emphasized, plant round-topped trees at the sides of the house. This will broaden the horizontal lines and make the roof appear lower. Often it is better to plant a tall tree at the back of a house to set off the architecture. The planting of trees in front of the house is a matter to mention, but I have in mind a half-timbered cottage on Long Island steps out from between tall trunks of pol-



By
ISABELLA PENDLETON

to KNOW before a GARDEN

larded willows. Why isn't it much more attractive to catch glimpses of the house through trees than to have its bold front stand before you in the hot sun? Another attractive Long Island farmhouse familiar to me is of white shingles and it nestles in a grove of English elms more than a hundred years old. One of these trees has all the appearance of growing out of the side of the house. It almost seems that the elm built the house out of some of its strong branches, so closely are the two related. A house should blend in with the landscape as these two examples do. It should not try to predominate in any conspicuous manner. Therefore, even if you do not plant enormous trees, plant small ones. You will be surprised how rapidly they will grow, softening by degrees the lines of your house. It is the height of the trees and hedges in the old gardens that we particularly admire. Height gives power and grandeur to a setting, and it is not possible to create this effect if we neglect to plant that which will some day give it to us.

Heights in shrubbery plantings are also important (not as in the suburban shrub border, which always reminds me of a petticoat with a scalloped edge. The ups and downs are too frequent, too severe, and too mechanically consistent). Simplicity in height, with not too frequent a variation of outline, gives strength to planting. It is far better to make the scale too big than too small. We may derive inspiration for this kind of planting from some of the old estates in Brookline, Mass. One picture comes to my mind of a large area of lawn backed by a grove of very old white pine trees near which had been planted a thicket of laurel. This picture was simple enough: green grass, one height; laurel, second height; white pine, third height. The bigness of each unit gave the picture simplicity of outline, creating thereby a scene of restfulness. The mistake that most people make in arranging shrubbery is to plant a few of one kind, a few of another, and so on until every kind of shrub that was ever photographed in a nursery catalogue has been planted.



"Why isn't it much more attractive to catch glimpses of the house through trees than to have its bold front stand before you in the hot sun?"



The walled garden possesses an advantage in having always an attractive background for its plant groupings

in that one bed. Study carefully first the purpose of the shrubbery. If you are screening an objectionable corner, decide on your heights, giving each unit a large space in which to roam. On large estates avoid borders of shrubbery of any kind; wide ones are bad, and narrow ones should be torn out at once if you own such a thing. Rather plant shrubbery areas (irregular masses). If two or three hundred feet long and about fifty feet wide in parts, plan generally on about two heights.

Height in the flower garden should also be carefully managed. The usual flower border has certain seasons when height is especially uninteresting unless wisely planned. One is in early spring, and another is in midsummer, the time when annuals reign supreme. The only way to get height in an early spring border is to intersperse some shrubs among the flowers, such as azaleas, *Daphne Genkwa*, *Viburnum Carlesii*, *Spirea prunifolia*, flowering almond, and *chœnomelos*. Yew and box have been used to advantage where height is lacking in the early spring border. I have also seen lovely pictures of standard peach and wisteria under which were growing nosegays of narcissi, tulips, *mertensia*, and *arabis*.

In late summer it is often difficult to obtain an interesting variation in height, as most annuals are uniform. Tall, spiky flowers such as hollyhocks, *galanthus*, *yuccas*, *eremurus*, *cannas*, *Cimicifuga racemosa*, and *echinops*, come to the rescue and are brought into the garden scheme primarily to give an interesting summer outline. Gertrude Jekyll, the famous English gardener, understands how to make heights interesting in a flower border. Usually she arranges her flowers so that four heights are enjoyed. Tall delphiniums are planted in back of intermediate phlox. Veronicas and iris bloom in front of these, and on the edge is planted *cerastium* or *violas*. Occasionally she plants a group of tall *yuccas* in the foreground so as to avoid too much sameness, which bores even the very phlegmatic. So you see that height plays an important rôle in designing a garden. In shrubbery as well as in the flower garden, subtle, carefully planted height variations are important.

The study of mass is an all absorbing subject to those who want to plant real

gardens. Mass is composed of two main forms, substance which inclines more toward the vertical and substance which inclines more toward the horizontal. It was interesting to me when I realized that the shapes of trees and shrubs affect the atmosphere of a garden. Tall cedars, Lombardy poplars, Italian cypress, and the like are the staccato notes in a garden. They give spontaneity and buoyancy to the scene. A garden planted with shrubs and trees more globular in appearance, like boxwood, yew trees, and maples, creates a sense of restfulness. Poets always speak of the peace that comes over one as one gazes at a vast expanse of sea. The prairies and the desert both cast a spell of calm over us. Their horizontal lines tend to have a quieting effect. The character of the country and the style of archi-

itecture of the house determines more than anything else the shape of the mass. In Virginia the globe mass seems to be more suitable than the upright. Large, round-topped shade trees are always in evidence near the old Colonial houses, and who can think of a Southern plantation without associating with it garden hedges on either side with boxwood? Spanish architecture rather demands the opposite treatment. I have wondered why the tall cypress is so frequently used around these castles, and it occurred to me that the clear, brilliant atmosphere has something to do with it. These thin trees stand out against the Pyrenean magnificent church spires, casting their black shadows against the white plaster of the castle walls.

The size of the mass planting is rarely considered, and when it is, generally the scheme has been conceived in too small a manner. The areas designed for the planting of one variety are generally too small. If you have a corner near the house which needs planting, decide on two or three things so as to get a mass effect rather than mixing too many varieties and thus creating a spotty appearance. In the Arboretum an entire hillside is devoted to azaleas; the mass conception there is satisfactory at all times and gorgeous when in bloom. The large planting of dogwood carpeted with white trilliums and blue Jacob's ladder (*Polemonium reptans*) makes a magic scene in May. Pink Japanese cherries blossoming in a wave of yellow narcissi greet the passerby. In the midst of all this color is a white grove where chairs lure many to rest awhile.

The flower borders should also display the same technique. The important flowers in the garden should comprise the largest groups, and only the ones of lesser value, which should be planted in smaller areas. I always give delphinium the *prima donna* rôle and rarely plant less than a dozen in a group. Foxglove is a worthy competitor for the blue queen and it shows off to the advantage when planted in long masses rather than placed in round areas. Peonies are better arranged in round groups, and likewise iris and phlox. The Madonna lily or any other lily family should follow the horizontal line along with the foxgloves. Then there are minor accents, very small patches of *Veronica rupestris*, *helianthemum*, *heuchera*, *Linum*



Mass planting as opposed to planting only a few of a kind is almost invariably to be recommended

and *Alyssum saxatile*. These are called and tie the whole scheme together. You ask where, oh, where, is the columbine—the faintest of all the flowers. This flower is so exquisite that I give it a chance to roam all by itself in a larger area of ferns under an apple tree. The delicate mauve, pink, and yellow are a color in themselves. In an English flower the massing is often so correct that I can see flowers from a distance by the various forms by each group.

Flower arrangement plays an important part in the planning of a flower garden. I think of it as the architecture of the flower garden. Comedians maneuvered wherever possible. A very unusual corner in a Long Island garden is made with dogwood behind the wall, azaleas inside of it, and in front of these phlox, *Hosta plantaginea alba*. The five leaf shape, height, and texture in a pleasing way as you may see from the photograph below. There are certain perennials planted purposely for the beauty of foliage; these include funkias, heuchera, *Hosta cordifolia*, yucca, thalictrum, leucophaea, and shortia (these last three are planted for the rock garden and woods). The enormous foliage effects are desired in the garden the ornamental rheums, lotus, bamboo, grasses, calla lily, and *Iris* are good.

There are also some shrubs which are especially good because of their foliage. The dwarf chestnut is such a plant and is often cruelly cut. It always looks lonesome planted, but see it, by itself in the middle of a lawn. A number of them in front of some tall trees (oak or Norway maples) and you have a picture. *Sorbaria sorbifolia* has large, ash-like leaves, resembling long plumes. Their foliage works in with foliage of design, such as *Viburnum Sieboldii* and *Magnolia glauca* merits a place in this garden. The foliage is very lovely—a glossy dark green looks well planted in an open wood—near dogwoods, halesia, *Cornus mas*, and

very effects give joyous texture to a garden. Annual gypsophila, *Linum perenne*, arabis, heuchera, thalictrum, and



A delightful flower setting, iris predominating, for steps leading to an upper level in the garden

columbine planted near plants of a coarser texture create a happy appearance. These to me are necessary frills, and like Southern mothers who dress their young daughters in lace and dotted swiss, I dress up the garden by planting yards of these dainty flowers. They give a misty look to a border. After all, the thing we like most in life is that which is veiled a trifle so that we do not understand the whole story all at once.

And now let us pause a minute to chat over the splendor of good color. A mere thought of its radiance warms the atmosphere about.

Ruskin says we ought to love color and to think nothing quite beautiful or perfect without it. It would be hard to imagine a flower garden altogether beautiful or perfect without color, so we rather agree with our English neighbor and will start at once to plant a garden that tingles with color. Blue, orange, yellow, purple, soft pink, and a bit of red, with neutrals such as brown, comprise all the colors and make a jolly chorus if carefully balanced. Suppose that we let blue predominate. Orange planted next to blue intensifies the latter. Soften the two by adding yellow in amongst the orange.

Dark accents like brown or dark purple will look well when followed by a dash of red and when surrounded by lavender if blending into pink. A scattering of white will place each color in focus and be a background for this polychrome display. To weave this picture in flowers, let us start with delphinium and orange *Lilium Hansonii*; yellow thermopsis and *Lilium testaceum* join the group in a friendly way. Brown helianthemum and purple salpiglossis continue the color procession in order to catch up to red lychnis and lavender candytuft. Pink phlox Elizabeth Campbell comes just in time to bloom with the mauve candytuft. White phlox Miss Lingard and Independence, thalictrum, and *Lilium platyphyllum album* group themselves in amongst the colors, giving to the whole a high, light glow. Of course there are many, many ways of mixing colors to form a brilliant picture, the secret of success lying largely in the balance of the various tones; if highly sensitive to color vibrations, one senses good color balance, but if not so gifted one should study color art carefully before planting a garden.

It is a bit exhausting in these times to sit down and read an outline of the many things there are to think about before planting a garden, but if you are not putting your thoughts on height, texture, mass, and color in a garden, you are putting them on something else, so why not?



successful corner planted with dogwood behind the wall, azaleas inside, and phlox, iris, and *Hosta plantaginea alba* in front

The MAGIC of WATER

Mr. Robert Glendinning Makes

Results in His Garden at The

Photographs



Two different views in the upper garden near the house, the one at the left showing a small fountain used as the central motif in a formal planting, to introduce into the composition the charm of running water



In the lower garden a large swimming pool, set like a jewel in the greensward, not only serves its allotted purpose, but mirrors the beauty of its surroundings, thereby doubling it

THE GARDEN

*of this Element with Fortunate
irrels, Chestnut Hill, Pa.*

CRY TROTH



The swimming pool from the end opposite to that pictured on the preceding page, and (at right) the stone steps leading down to it from the upper level. Pennsylvania field stone lends itself happily to this sort of picturesque treatment



A lily pool on the lower level, but directly under the windows of one end of the house, so that it may be enjoyed indoors. The liberal use of stone water jars throughout the garden gives it an Old World atmosphere



Another lily pool on the upper level



One feature of this garden cannot fail to strike the beholder and that is its livableness. Wherever fountains or pools invite, there you will find comfortable chairs and tables. The elaborately carved fountain in front of the house

MUST-HAVES for the FLOWER GARDEN

By FLORENCE TAFT EATON

en without certain favorite flowers is garden at all. In this article the author the planting of some flowers that have en favorites and which should be in every garden plan.—THE EDITORS.

A true garden-lover it is a difficult matter to sit down and select the inhabitants for that enchanted portion of the home which is—or is to be—the garden of our old favorites immediately themselves into a silent procession compellingly through mind and heart. Also there are appeals to different personalities in the perfect garden, large or small, to my mind, contain enough old which, by their constant appearance in countless generations—so to of homey, beloved gardens, have themselves worthy to form a around which plain flowers and elties may happily gather.

are planning for and planting in soil in the new garden or rethe ranks of the old, what shall t as essential—to be, perhaps, added to? I am often asked stion by young homesteaders g the altogether fascinating purgarden making. Certain and perennials have proved themworthy to take first place, as

peas—but only if space is sufficient them in the vegetable garden ve one, that they may reap the re of vegetable garden condi care—frequent cultivation, enriched soil, sufficient waterant in the early spring rather first soaking the seed. Leave ghtly trenched, rake in a little soil among ts as they appear, and fill in carefully e to time. Do not plant a longer row u can keep well picked. The Giant variety seems most beautiful and satis-



eous colors and the long blooming season of the place it in the first rank of must-haves for the garden



Cosmos is one of the most beautiful and valuable of our annuals. It has been wonderfully improved of recent years, and the colorings now to be had are exquisite

girl I used to be sent by my mother—one of those natural garden makers for whom every plant bloomed and flourished to its most luxuriant extent—with old-fashioned bunches of these two enchanting flowers, to a dear old lady who loved this fragrant and beautiful combination, and my delight in them has always remained. Mignonette is a bit fastidious; every soil does not suit it. That in my garden does not; but I always persist; and although I cannot produce the stunning spikes of the flower catalogues, I can at least coax into bloom enough of the modest but altogether enchanting brown and green sprays to encircle not only my sweet peas, but also bunches of verbenas, pinks, and other old-fashioned favorites. Remember that mignonette does not transplant, having a tap root. Plant where it may remain undisturbed. Thin out ruthlessly, to insure thrifty, sturdy plants.

Nasturtiums. These are to me a must-have. A perfect table flower, with a slight, clean, pungent odor, growing in sufficient variety of hues to fit into any color scheme, and blooming until late frost, they are as useful a cutting flower as any in the garden. Plant the running sorts, always, if you can possibly spare space; the blossoms are finer, longer stemmed, and more abundant. Practically every seed germinates, therefore plant sparsely, about four inches apart.

Poppies. These are so enchanting and varied that I should include them in my list. Be sure to start with the graceful Iceland poppy—a biennial perennially inclined. This is among the first spring blooms, and—an excellent point—a good picker. If started early in the spring you will get some first-year blossoms. Next comes the corn poppy—forever after to memorialize Flanders Field. This, once started in the garden, is a permanency, self-sowing itself liberally. I always carefully transplant the scattered seedlings (selecting a day when the earth

is moist and sodden) into rows down my garden path, in the ample space allowed the peony border. The peonies develop slowly, and the poppies are up, in bloom, and pulled out, before the peonies take possession of their entire domain.

I also set separate or clustered plants in perennial borders and the bulb beds, and am delighted by glowing splashes of early, ardent color. Later on the Shirleys and the double, fringed, and parrot-varieties of every shade, shape, and color, extend the gay poppy procession into the summer. Plant all of these on the vanishing snow.

Pinks. Chinese—now attaining a perfection of color, form, and size, and invaluable for the very late fall bouquet—and Marguerite carnations. The latter are seldom seen in small or even moderately large gardens, but are among the very loveliest flowers that bloom, producing their many-colored single and double flowers most luxuriantly. They have the true carnation odor, spicy and delicious. Start seed very early—in the coldframe if possible—and you will obtain blossoms the first season; but the great show occurs the second year. They are really biennials, and often prove perennials, and perhaps should be included in the latter class. They are half-hardy, and should be lightly covered in winter.

China asters. No other variety, perhaps, of annuals is so showy, useful, and beautiful for the small or large gardens. They are very ornamental in bed or border, unsurpassed for picking, and splendid keepers. The blooming season is limited, although long; but by planting two or three times a long succession of blossoms may be obtained. Start the first instalment as early as possible in the coldframe or house, and transplant when the second leaves are well started. I find that double rows set in the vegetable garden—to which they give a very festive appearance—is the most satisfactory method of planting those for picking. The light colors are most beautiful. The single, daisy-like variety is to my mind one of the most beautiful annuals raised. They exhibit the most



The qualities that make the marigold popular belong likewise to the zinnia, though the latter is a little less vivid in coloring



Among the perennials, phlox in some of its many varieties is the first to be selected

exquisite shades of light pink, blue, mauve, deep crimson, and pure white. By saving a fully ripened head of each and mixing the seed to plant the next spring, you will insure an unlimited number of thrifty seedlings at no expense. When transplanting any variety of asters always put a spoonful of wood ashes in the holes, mixing it well with the earth.

Zinnias and *Marigolds*. (Be sure to include dwarf zinnias and the French marigolds.) These

starting them, seeds of the largest and finest flowers may be easily saved. Plant as early as possible and transplant into rows. It is particularly lovely set in the asparagus bed, after the last cutting, to develop among the feathery asparagus plumes to which its own foliage is akin; it also makes a beautiful piazza border, and is especially effective at the back of massed planting, its blooms rising above the foreground flowers. Self-growing seedlings may often be salvaged.

are among our must-haves, as we greatly admire their gorgeous, wonderful coloring. Their season of bloom is almost unlimited—a great asset, especially in the small garden. These formerly humble and less esteemed flowers have come into great favor of late, and have been wonderfully improved both as to the color and size of the blossoms. Save your finest heads for seed and thus improve your stock. Always start in the coldframe or seed bed, and transplant when well started. We use them very effectively as boundary hedges in the vegetable garden, or to border the paths. A dwarf strain of zinnias, both in orange-yellow and vivid scarlet, is very beautiful.

Pansies we must have for the spring garden. Buy the blossoming plants for early bloom, and start seed for fall blossoms. Include the beautiful violas, surely.

Cosmos. This beautiful and valuable annual has also been wonderfully improved in every way of late years. The size of the blossoms of the finest varieties is truly marvelous, and their coloring exquisite. It pays to buy the finest seed, and after once

It is difficult to bring the list of annuals close. Crowding close in our affections are *William*, *salpiglossis*, *scabious*, *mourning*, *verbenas*, *Phlox Drummondii*, *calendula*, *pet* (include the *Rosy Dawn* and the *Royal Purple*), *sweet alyssum* (for borders of sweet odors), many, many others—an ever increasing list to give full play to memory.

Phlox. Among the perennials I suppose almost every one will agree that phlox, in some of its numberless glorious varieties, is the first selected for the small, or large, garden. Be sure to include plenty of white ones, and plant others carefully—as to coloring—with your neighbors. *Miss Lingard* is an early flowering white variety, most valuable and effective. Spring phloxes are a charming addition to the hardy garden.

Larkspur (*delphinium*) is second to none of the perennials in beauty and effectiveness. Neighbor some with *Madonna lilies*, if possible. Include some deep blue, sky blue, and the enchanting shades. As it is easily raised from seed (or sown seedlings may be abundantly salvaged from the coldframe or open, borders and beds may be liberally supplied at no cost. Rake wood around the clumps in early spring to discover grubs; search for cutworms, which do much damage.



Poppies are so enchanting in their numberless varieties that they must be included in any list



Roses are in a class by themselves—no garden, however small, should be without at least a few of the old-time favorites

hollyhocks and foxglove (*digitalis*), are practically perennials, as they are self-seeding, although in reality biennials. The former are useful with a stone wall for background, for planting in corners, or for foundation planting; the single to the double. White foxgloves are, to my mind, infinitely more lovely than the pink variety. Group in shady corners, as background for low-growing plants, or plant at the edge of woods. Cover with a mulch in the fall, as they are easily winter-killed.

Campanula. This family includes the oldest and most beautiful Canterbury bell (*Campanula media*), the *carpatica*, and the *folia*, and should be liberally planted if space allows. The last two varieties, once established, need cause no anxiety as to their longevity. Canterbury bells, like foxgloves, are perennials, and share many of their characteristics. Like them, they are easily winter-killed, and should be similarly covered in winter; avoid covering the crown.

Thymus I value highly. Raise from seed, and have all self-sown seedlings. The mature plants need not be disturbed, but will flourish in the same position for years. The daisy-like blossoms are beautiful for picking.



Pansies are indispensable for the spring garden. They are at their best when massed, as here.

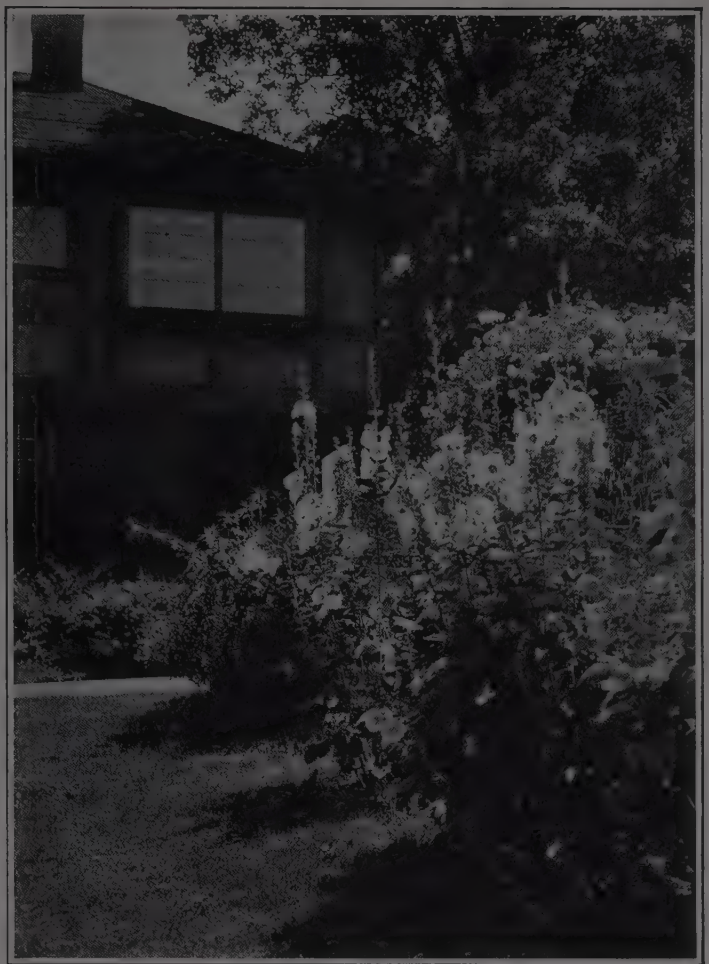
Iris. Every garden of any size must, of a certainty, contain some of the varieties of this queenly flower. Secure a long season of bloom—if you have space—by including the tiny *pumila* (one of the very earliest spring flowers), the *cristata* (a charming very dwarf variety), as many of the German *irises* as possible (May and June), the *orientalis* and *siberica* (June and July), ending with the regal Japanese. The English and Spanish *irises*—bulbous varieties—produce some of the most enchanting blossoms imaginable.

Columbine (*aquilegia*). Especially charming in the spring garden. The old-fashioned single and double sorts should be included, but especially the long-spurred hybrids, of every enchanting orchid-like color under the sun, and resembling flocks of lightly poised dancing butterflies. Most beautiful for picking.

Hardy asters (Michaelmas daisies or starworts) are surely a must-have in the fall garden. They are of luxuriant, feathery growth, bearing myriads of starry flowers in all shades of deep purple to palest lavender, and white. Include the tall, royal purple flowered and the pink flowered New England asters, and as many of the lavender and white as space will allow.

Heleniums, *helianthus*, and *heliopsis*. These are groups of very valuable yellow-flowered perennials, most beautiful in the fall garden. Include as many as possible. These are all not only most ornamental in the open, but beautiful additions to gorgeous fall bouquets.

Roses are in a class by themselves and it is to be



Hollyhocks are one of the indispensables for massing in corners or for foundation planting.

inferred that no garden, however small, should be without some favorite specimens. At pruning time, cuttings of the climbers may be set, banked thickly, in some sheltered corner, providing, if kept watered, an abundance of sturdy, well rooted plants that the next season may be planted to cover boundary fences, pergolas, and piazzas. Be sure, when selecting your climbers, to include the beautiful Silver Moon, and Bloomfield Abundance.



The native perennial asters give masses of bloom in the fall garden, and as many varieties of these as there is room for should be included.

ECONOMY in gardening is about like economy in anything else. It depends on getting the design right in the first place, so that you don't have to make corrections and do it over. It depends on right building from the first, so that there is a minimum charge for repairs. And it depends on easy maintenance, whereby to cut down the cost of the permanent labor force.

The compact, but not crowded, design is most economical. There should be no odd, useless corners about the grounds. In learning how to plan our houses we have mastered these details, but out-of-doors we are just beginning to emerge from the waste period. On the north side of the house, around the clothes yard, behind the garage and almost anywhere you look, you will see real-estate on which somebody is paying taxes and getting no more fun out of than is to be found in running a rusty lawn-mower over quack grass. There may be a separate, well-kept garden; a neat garage drive and yard; a screened clothes yard. But between them and the house and each other is waste land which is certainly not attractive to look at, as it is without form, meaning, or use. It is but a fruitless burden requiring more or less maintenance, which costs either money or work.

To be economical, a place must be laid out so that every square foot has some definite function, either for use or beauty. It must be as carefully arranged as the house. In fact, lawns, house, gardens, and garage should all be properly disposed on the plan before the house is definitely located. Each one must be properly related to the others, as, if wrong, any detail of the place, such as the house, will hurt everything else. The smaller the place, the truer the rule. This is particularly the case in hilly country when the house is built before proper attention has been given to the drive location, which happens more commonly than would be supposed. And it often means that a drive must be blasted out or built up on walls at great expense, when a little rearrangement of the house location in the first place would have made it possible to put in a road on easy grades for a fraction of the cost.

Now any place in which there are no useless corners and no waste space will be, by the very nature of things, compactly arranged. Lawn will touch garden, garden will meet rose garden or cut-flower garden or vegetable garden or what not. The possible variations are infinite, but the principle is always the same. If there is not much room, the utmost will be made of what there is. If there is more than is needed for the outdoor appurtenances of the home, then there will be farm or wood with the treatment appropriate thereto. In any case, nothing can properly be termed waste.

This thought to economy of arrangement should extend to every detail. A garden bed takes constant endeavor to keep it in good condition. Each plant requires individual care which can be given meticulously only by hand. The weeding for the most part must be done on all fours. To be economical, one should design the garden to get the maximum effect for the minimum herbaceous and annual bed area. Flowers for cutting only should be grown like vegetables, in rows, so that they can be weeded and tilled with a wheel cultivator. Treated in this way they are economical to maintain and add materially to the appearance of the vegetable garden.



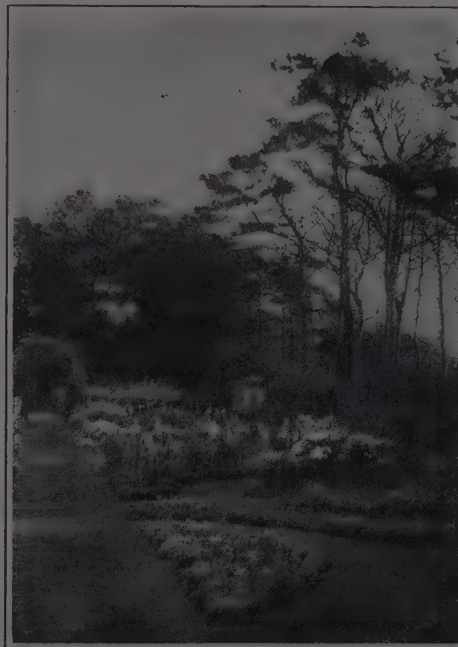
Arthur A. Shurtleff, landscape architect
A narrow flower garden separating vegetable garden and lawn—an excellent example of economy in plan. As the back of these beds is difficult to reach, it is filled with coarse plants which largely maintain themselves. Garden of W. K. Richardson, Esq., Nahant, Mass.

CUTTING GARDEN COSTS

By FLETCHER STEELE

Even the simplest of gardens may entail considerable expense unless one is careful. The author of this article—a well-known landscape architect—suggests many little details whereby the cost of the upkeep of the garden can be considerably decreased

In the garden itself more attention should be given to the combinations of shrubs and flowers. Thoughtfully arranged together, the result is



A charming garden in which the design is brought out by pattern beds. As much of the work is done by the owner, the beds are narrow to make the work of planting, transplanting, and weeding easy and economical

more beautiful than either group used alone. This is the surest and quickest way to get "atmosphere" in a new garden. Even a small shrub fills the place of a dozen plants and takes less attention than any one of the things it replaces. Care must be used to keep the bushes in bounds, but above the ground and below it. But this is equally true of the coarser flowers if they are mixed with the other plants.

When the location of various features is determined upon, construction may be begun. "What is worth doing at all is worth doing well." Skimping shows where so quickly as in landscape architecture. But a retaining wall too thin along comes Jack Frost crumpling it like a house of cards. Omit your underground drains and your house ceases to fill with water after the first rain. These points are made fairly obvious by unmistakable results. They may be grouped under the heading of engineering.

The effect of the same procedure is as bad in house culture. Strew your lawn with ashes and subsoil from your cellar, and sow it with cheap grass seed from the corner store. Then climb up on the veranda and watch the weeds grow.

Buy an expensive shrub (all shrubs are called expensive by such people), dig the smallest possible hole in the old sod, crush the roots together so as to get them all in the hole, break up the lumps of clay so you can shove them somehow in on the roots. Then while you watch the sticks all summer, tell your neighbors what you think of the nursery that sold them. This happens so often as to be a commonplace. The final touch is given by the owner who likes to play with the hose. Day by day he goes about with a sprinkle here and there, just enough to wet the surface of the ground over his entire place. The inevitable result is to cake the surface of the soil in such a way that even the natural underground moisture comes to the surface and is evaporated and lost. The best way to kill a plant by drought is to water it a little every day.

If you have the economical desire to have nursery stock grow, have deep friable loam, enriched with rotted stable manure. Keep the manure away from the roots when planting, but put in bone-meal mixed with the soil just outside the roots. Give everything its appropriate commercial fertilizer whenever it is needed. Mulch well, especially the first winter or two. Above all, when you water don't stop short of soaking the ground down to the bottom of the roots. It takes a great deal more water than most people imagine. When well watered, the earth stirred on the surface, and few things need water more than once a week, if that often. This is true economy in gardening. In a couple of years the shrubs and trees will be able to look after themselves except under rare circumstances.

Easy, hence inexpensive, maintenance depends on good service circulation and access to everything convenient for the gardener and the furnishing all possible labor-saving devices in his work.

Service circulation is forgotten by a great many gardeners who are otherwise thoroughly practical. One should be able to bring a horse cart as near as possible to all parts of the place. Otherwise all material must be fetched by man power, wheelbarrows, and in the long run that is a more expensive way to do. More things are neglected than are often remembered. For one thing, there is always manure, spring and autumn, and lo-

in the small garden. There
ing to be brought in here and
the autumn and taken out in
ing. Often one needs extra
one reason or another. One
inspired to bring in a large
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In New England at least,
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which can be reached only by
f steps will make it impossible
even a loaded wheelbarrow
nd up without two or more
lift it. Somewhere there
be ramps (steep paths) by
ne can get from level to level
steps. Or, if steps are nec-

an inclined way should be provided for the
arrow, wheel, so that the bump, bump,
f the step is avoided.

l thought should be given the width of
The limit to which a man can comfortably
onomically reach into a border when on
ds and knees is thirty inches. The dis-
something less for a woman. Supposing
to be possible from both sides, the bed
be limited to twice thirty inches, or five
width. Anything wider than this is
ly more inconvenient and hence more
and expensive to maintain properly.

y designers pay no attention to this fact.
ill plan a border that can be reached only
e side, as wide as five or even eight feet.
akes for costly or slovenly maintenance.
ay should be provided to get into the
art of the beds. Sometimes a perman-
row path is best. But where this in-
with the design, it is generally possible
a narrow, inconspicuous walk of heavy
g stones. The plants will grow out to
them and can be gently pulled aside when
ecessary to enter the beds.

e must be a good tool house, amply big,
means at least twice as large as the largest
ieve will be necessary. Any old shed
do for a tool house. Nothing is more
l than to keep everything in a heap in a



Beds and lawn should be separated to make maintenance easy, but a high curb like this is not necessary. Any strong edging will serve which will not permit grass roots to get in the beds nor plants to sprawl over the grass, when each one must be lifted by hand every time the grass is cut

dark hole. It is difficult to find anything. It is impossible to tell which things are on hand and which are lost. Tools are not kept in proper condition unless somebody can see them on a frequent visit of inspection. Everything should have its place, the larger tools such as roller, lawn-mower, cultivator, and hose reel where out of the way and easy to move without getting around everything else. All the smaller implements, from hoes and rakes to trowels and dibbers, should be hung on hooks or ranged in their proper places on shelves or in drawers. A good light is essential. In many cases it is feasible to have at one side a generous expanse of glass where one can do a bit of simple forcing of seeds in flats, when other glass is out of the question.

On any place where it takes two days for a man to cut the grass with an ordinary mower, it is worth while to have a motor mower. If there is little complicated cutting to do, it will probably be easy to do it all in half a day, even the trimming. It is surprising how steadily, even an exceptionally lazy man will keep walking behind a lawn mower that will not go slower than four miles an hour. It is then the trimming which takes the time. But even the trimming can be reduced materially by various devices. For instance, where the lawn is stopped by a wall, it is easy to lay a single row of bricks level with the grass along the footing. The side wheel of the mower will go over on to this brick and the knives of the machine will cut all the grass. The brick itself is practically invisible. In putting up terraces and balustrades, the base should be wide and level with the lawn for the same reason.

Trimming is troublesome along the edges of paths and beds. Put in a metal edging so that the grass cannot creep beyond its legitimate, appointed place. This does away with the edging tool, which is a barbarous instrument except in the hands of the skilful and slow, hence expensive, in any case. If you want grass paths in the garden, be sure that they are the right width for convenient mowing, or else you will find that a pair of overalls is the one permanent blue color note and the sound of the clippers more enduring than that of the thrush.

THE one steady job next to mowing grass is watering. Abundance of water is an absolute essential to good gardening. This is where the greatest number of people, even intelligent gardeners, fall down. They do not lay on a sufficient water supply. In fact, in most cases the pipe which furnishes not only the garden but the house and garage as well, is commonly too small for the garden alone. With any modern irrigation device anything less than a three-inch pipe is a snare and a delusion. The principle of these contraptions is to turn on a large number of small streams of water by one valve. If the supply pipe is small, the result is like that in a house when all the faucets are turned on at once—

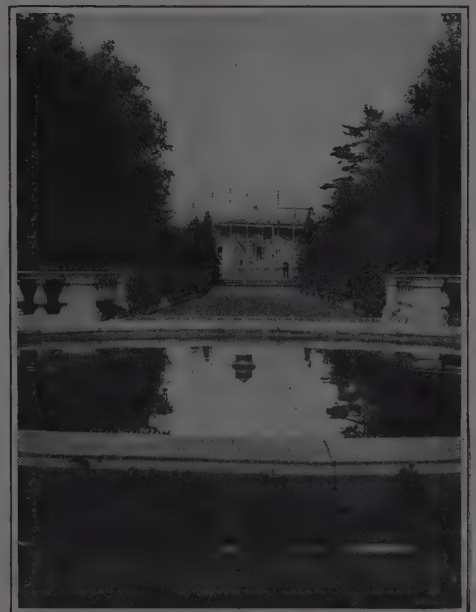
none of them gets any water to speak of.

These fixed irrigating systems are remarkable economizers of labor. They are to be found in various styles and patterns. Some are best for one thing and some for another. With a strong pressure of water and an adequate supply, a single pipe will cover an area sixty feet wide and indefinitely long. They can be made practically invisible. The result is that with a few minutes time a man can turn on a valve and leave the water running until everything gets thoroughly soaked. Rhododendrons treated in this way grow twice as fast and well as those which get no artificial irrigation. No money is better spent than on a good system of watering. And the higher the water bills, the better pleased the owner must learn to be. One other result of such a scheme is worth notice. On very hot days, as soon as the sun goes down, it is possible to reduce the temperature of a garden from un-

bearable to most delightfully refreshing in a very few moments by covering it with a voluntary shower.

Even with such irrigation, it is well to have very frequent take-offs for hose. Sometimes special watering must be done that cannot be accomplished otherwise. This is necessary in the rose garden. No really good system for watering a rose garden has been put on the market as yet. Roses can be easily spoiled, their buds damaged and their color faded and spotted by any watering that covers the bushes as well as the ground. The hose is necessary for cleaning and washing. It is like a broom indoors, which one must have, no matter how many carpet sweepers and vacuum cleaners are provided.

It is plain that all these permanent economies require a comparatively high cost of original construction. Ask yourself if there is any exception to this course of events in other matters. A cheap suit looks shabby in no time and never has any style. A cheap piece of machinery looks like what it is, even if it works. There is no way of avoiding the cost of a thing well done in the first place. To be sure, the cost may be taken out of the owner in thought and personal work instead of money. But it is high cost, nevertheless, that one pays for original construction well done.



House, lawns, drives, gardens, and garage should all be located before the house is built. Here the owner had the gardens built first to take advantage of all trees and views; then built the house so that he could walk out on finished grounds the day he moves in



Example of high original cost and economy of maintenance. Overflow water from the fountain is carried by gravity under jets below. Wide beds, difficult to maintain, and shrubs with flower borders. The whole place is watered by turning a couple of valves in concealed pipes



In January roses are likely to be found on the vines that clamber over the quaintly gabled roof. Shrubs and plants in luxurious growth bower the house, emphasizing the broad hospitable lines of the dwelling, which at the same time maintains a dignified elegance by the use of stucco with wood trim

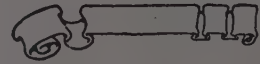


February finds the acacia in bloom. This variety, planted by the rear entrance, is a golden glory with its fluffy yellow flowers and fern-like leaves of silvery gray



March—and from the terraced land at the north and east of the house, one looks out over the valley to snow-capped mountains. Fruit trees add splashes of pink and white and plumes of the pampas grass lighten the rich darkness of evergreens

The YEAR 'ROUND in a CALIFORNIA GARDEN



FLORENCE YOCH

*Landscape
Architect*



April—tulip-time too. A-bloom here in perky rows, they try to look over the brick-topped wall to get a glimpse of the garden below, where clumps of iris, white, pale blue, and deep purple mingling with stocks, daisies, snowy white and scarlet, marigolds and pansies, and lilacs in lavender and white perfume the air



May. Roses are Queen of the May in the garden now. In jolly and informal fashion they climb over the rustic fence and entrance gate. A seat here bespeaks welcome, and a curving walk, flower edged, leads invitingly to the house



June. Roses cover the trellis that arches this lovely walk. And roses with great big gold hearts, rich crimson and pure white petaled ones are trimmed up tree fashion in this garden, to show their pretty faces to the best advantage





December. One of the charms of this Oak Knoll estate is the inspiring view of the Sierra Madre range, fold upon fold of rock and earthy slope. At evening, the deep blue of the mountains darkens into purple, and the night has come. The garden has spelled its beauty in the circle of months



November. The sunny wall, the potted palms, and the glint of orange trees make this outdoor living room delightful. At this time chrysanthemums make the garden cheery with color



October. Autumn, when the countryside is mellowed with haze, makes this sunny seat inviting. Here, as in the rest of the garden, natural beauty has been left undisturbed, and the falling leaves make the walk crispy to the tread

The Garden of *Mrs. J. A. FREEMAN* *PASADENA, CAL.*



Photographs by
DOROTHEA De M.
DUNLEA



When the days grow warm, one seeks the shady nook where the wisteria offers the shelter of its light green leaves. A swinging and bricked floor hint of a tea house, but even during is the vista looking up the garden toward the steps



September—summer not over yet. The garden pool is an entrancing spot. English ivy for border planting gives dignity by its simplicity and the mirror-like surface of the water is emphasized by the reflection of weeping elm and water jar, mingling with the patterns of lily pads and water grasses



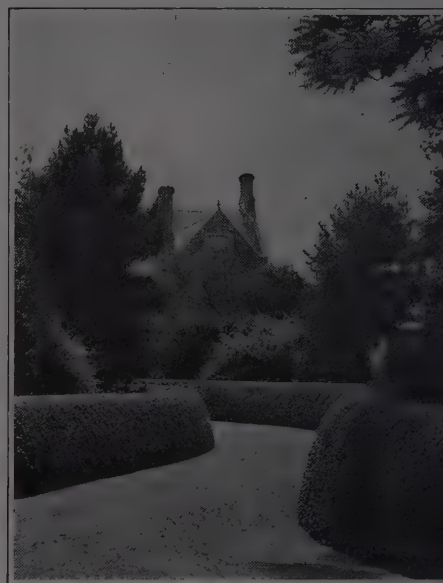
August. The garden slopes gently down to a forest of live oaks, whose generous sweep of branch protects the vines creeping over the rocks, and the ferns and flowers such as cineraria and forget-me-not, which are at home in this cool, moist place





Privet peacocks guard the staircase that leads from a terrace to the lawn in front of the house

A section of the winding entrance drive that throughout its considerable length is bordered by such hedges as these



The TOPIARIST SHOWS HIS SKILL

Photographs by ROGER B. WHITMAN



The enclosed garden at the back of the house is surrounded on three sides by a remarkable pierced hedge, clipped to a festooned top, and with regularly spaced finials

The service court is reached by a branch of the main drive and is completely hidden by the garden hedge

The space behind the hedge wall of the enclosed garden is a mass of flowers with roses predominating



*On the ESTATE of JOHN GRIBBELL, Esq.
AT WYNCOTE, PA.*



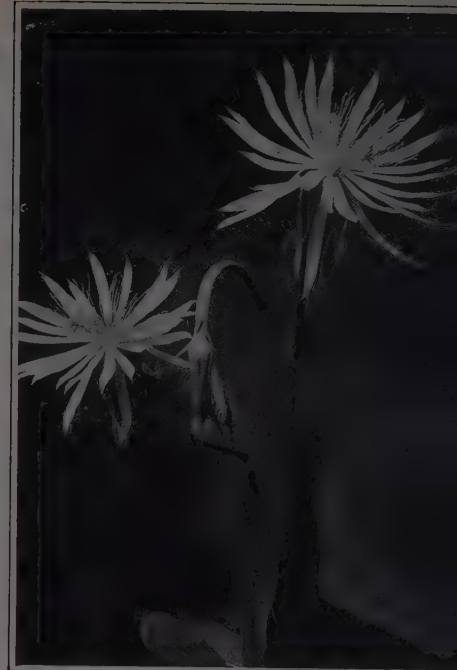
This picture and the one adjoining at the left include the greater part of the enclosed garden, and indicate its size as well as the extraordinary proportions of its hedge walls



Echinocactus setispinus—the cylindrical type of cactus. Its yellow blossom has a purple centre and its fruit is sweet and edible



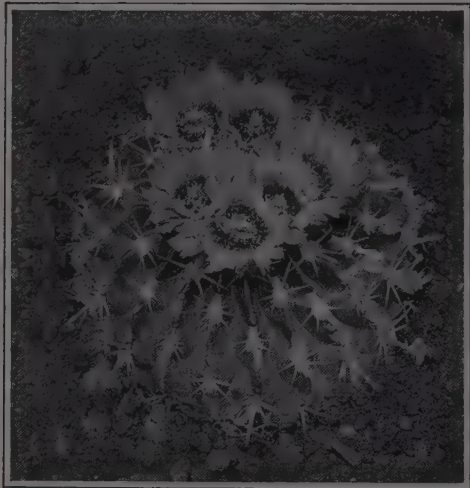
A rare type—*Echinocereus reichenbachianus*—having a purple blossom with white centre



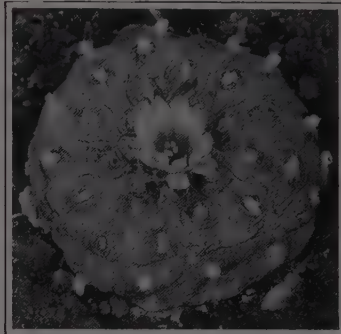
The flowers of the night blooming cactus open only at night, as the name of the plant indicates

DESERT FLOWERS THAT BLOOM in the SPRING

Photographs from Kate Paul Anderson



Echinocactus texensis, known as the devil's pin cushion, has variegated purple blossoms



Lophophora Williamsii, a rare species believed by the Indians to possess occult powers because when eaten it produces a state of ecstasy



A miniature flower bed—the yellow and white blossoms of *Mammillaria hemispherica*



The Mexican strawberry, *Echinocereus stramineus*, bears magenta colored blossoms which later turn into a salmon pink fruit having the flavor of strawberries



An angle trowel is a handy planting tool far preferable to the ordinary dibble



The two-pronged hoe will be found as useful in the vegetable patch as in the flower garden

ESSENTIAL TOOLS

ANY a good intention to make a garden or to have a better one has died before it materialized, the reason being a failure to provide proper tools. A garden can be made with nothing but a spade if no other tool is available, but to wield it with any length of time is more than can be expected of the average American home gardener. I am going to introduce to you in logical order the essential tools—those you simply must have; the helpful accessories designed for specific tasks better; and the most perfect tools with which to do the most difficult jobs the best way.

Obviously, different kinds of gardens require different kinds of tools. But one phase of gardening is fundamental—soil preparation. After determining the type of garden you wish to have, plus the soil you have, plus the size of the garden, determine what kind of tools you need to make that garden a joy. Two factors are to take all the fun out of gardening—lack of tools and weeds. The enthusiast does not mind working as long as he has the proper tools with which to combat them.

I began to explore a city lot overgrown with weeds, cans, barrel hoops, crab grass sod four feet thick, and various heaps of building refuse. I was inclined to believe that spade and rake were sufficient to make a good garden. My experience has caused me to change my mind. The most essential tool to make a garden, in particular, is an old-fashioned grubbing hoe. I mean the one with two prongs, the tool with which a ten-year-old boy can move tons of sod and not grow tired. It is that in the preparation of new land that a preliminary grubbing hoeing takes the hard work out of spading. It loosens the soil to a depth of at least six inches and breaks up sods sufficiently to make spading easy. Whether you want a spade or a fork for the final digging of the soil depends largely upon the character of the soil. On heavy clay I have found a fork absolutely useless. Before a dozen tools are made, at least two of the prongs would be bent.

A good spade, with the flanges of the blade extending nearly half way up the handle, is a tool *par excellence* for soil preparation. It will dig to a depth of at least ten inches, whereas a plow or a moldboard never turns more than eight inches. A thorough and deep soil tillage is the prerequisite of a good garden.



The really essential tools—spade, rake, grubbing hoe, hoe, and fork

By ADOLPH KRUHM

On the other hand, where light loams and sandy soils predominate, a fork will help put the soil in excellent condition at a great deal less expense of lifting. The fork will break up the soil, permitting it to run through the tines as you turn and lift. It will leave the soil in smoother condition, requiring less raking. Also, it is easier to remove trash with a fork than with a spade. Since most gardens hold a great variety of soils, it is desirable to provide both a fork and a spade, even on a small place.

After digging comes raking, and I cannot be too emphatic in stating that the quality of the rake largely determines how easy or how difficult a job of cultivating faces the gardener throughout the season. That it is more difficult to rake with one rake than with another I learned twenty years ago. And the rake that did the job best proved to be a straight iron rake, set at right angles to the handle. Such a rake requires less twisting of the handle and cleaning of the teeth, and it will do more level or straight raking than any rake with curved shoulders and bent teeth.

AFTER raking come planting operations, and the most essential planting tool is the hoe. It is needed to open and close furrows. Now I can

for the GARDEN

hear many advanced gardeners exclaim "Heresy!" And yet, after twenty years' experience, embracing gardens ranging from a quarter acre to four acres, I have come to the conclusion that the common hoe is the home gardener's greatest standby. Except for the specific job of flower gardening, where a special hoe is required, I have found a small to medium sized hoe with a four- to five-inch blade the most satisfactory. While not taking as broad bites as a larger one, it is the least tiring in the long run.

Besides the hoe you need a dibble, a trowel, a garden line, and record labels. An angled dibble is preferable to the commonly used round ones, because it does not foster the danger of potting the plants or bulbs or roots in a round hole with a deep pinhole at the base. The only satisfactory trowel of the regular type is the all-metal one with a short wooden handle. A garden line is necessary to get rows straight because crooked rows are difficult to cultivate; and record labels are absolutely essential because all true progress is based upon accurate records.

Plants need air quite as much as they do heat and moisture. As a matter of fact, a reasonable abundance of these latter two make the question of air in the soil and around the plant roots a matter of life or death to the plant. There are notable exceptions to this, as for instance the tomato, but the vast majority of cultivated plants require that the soil around the roots be aerated or the crops will suffer.

Now, there are two distinct types of tools available to break up the soil in process of cultivation: the straight blade, as found in the common hoe, and the tooth cultivators fashioned after the bent fingers of the human hand. Both have their distinct advantages and limitations. It all depends on the crops you are growing.

Broadly speaking, any crop with spreading tops should not be cultivated with tooth cultivators; at least the tooth cultivator should be kept far enough away from the base of the plants not to interfere with lateral roots. Compact-growing and deeply rooting plants, on the other hand, like lettuce among vegetables and poppies among flowers, love to have the soil stirred deeply around the plants. And, in passing, let me say that most flowers are shallow rooters, so that deep tillage in the flower garden is seldom desirable.



Hand cultivator with keen-edged, scientifically shaped teeth

The ordinary hoe has already been referred to, but for light cultivation and for the flower garden I have found a two-pronged combination hoe quite useful.

In looking back upon the years when the essential tools so far discussed seemingly proved all that were necessary to garden making, I cannot help but regret my lack of desire to do more experimenting. Even to-day, there is no general appreciation of the modern tools on the part of most garden makers. But as the gardener becomes familiar with the ease with which the scuffle hoe, for instance, disposes of surface weeds and breaks up crusts, the old-fashioned hoe will enjoy longer vacations. So let me tell you something more about the newcomers to the ranks of efficient garden tools, implements that turn garden cultivation into joyful pastime.

Again, the nature of the soil in your garden determines whether you want a blade or cultivator teeth to break the soil. On all sandy soil, loam, or muck, the modern rocker hoe with two-edged blade is the tool to cover the ground easily, rapidly, and effectively. A child of ten can out-hoe grown-ups any time with this tool.

On the other hand, heavy loams and clay soils require a tool that penetrates. The last ten years have seen almost a dozen different tooth hand-cultivators make a bid for popular favor. Probably the best of these is one having scientifically shaped teeth which easily penetrate



When digging rest the weight of the body on the spade, and lift with the leverage of the arms

the soil without downward pressure, while their sharp edges cut the weeds at the same time.

Because of its light weight a new weeder that is on the market will be particularly appreciated by the fair gardener. These weeders consist chiefly of a number of strong, springy wire prongs, and to the back of the larger models are attached serviceable hoe blades, either pointed or square. For cultivating flowerbeds and for working in the shrubby border or among perennials they will be found helpful and effective.

AS THE garden increases in size, there appears the need to cover the ground more rapidly. To attach a wheel to fundamental tools so far described proves the next logical step. And by experimenting with different combinations of wheel, frame, and tools, American genius finally perfected the wheel hoe. Specially shaped hoes, cultivator teeth, and plowshares constitute the equipment of the simplest type of single wheel hoe. From that to the latest motor driven garden cultivator we find a long line of complete garden tools, all designed to do specific work better and with less physical effort. Any gardener cultivating a space 50 x 100 feet will find a wheel hoe useful. To garden a quarter acre or more it is essential.



A rocker or scuffle hoe that destroys surface weeds and creates a dust mulch

A few hints on how to use the principal tools mentioned to secure the best result from the least effort seem in order. Since many of us descend from generations of city dwellers, we cannot always lay claim to the instinct that would guide us in the correct handling of tools. If you doubt this, just visit a city school garden and watch the youngsters. A hearty laugh is in store for you.

The easy and initial gardening operation is digging—at least it should be easy; and yet it generally requires several days of practice to get it right. Most beginners try to dig with arms and knees. The result is that after a little while both limbs become tired and digging becomes a hardship. The right way to dig is to let the weight of the body press the spade into the soil by bending over it as shown in the illustration. The lifting part of digging should be done by using the two arms as a lever. A little practice along these lines will soon justify the time it takes.

Hoeing for hours at a stretch, and in such a way as not to tire the body is a fine art. Most gardeners attempt to hoe with the broad cutting edge, making it unnecessarily hard for themselves. The seasoned gardener hoes with the



A light weeder for flower gardening. The long-handled styles have hoes of different shapes on the back

two corners of the hoe, for the point of the corner penetrates the soil more easily than does the broad edge, and in addition, the broad cutting edge being held away from the row that is hoed, will prevent the cutting of many of the laterally growing roots that are just beneath the surface.

Correct raking requires consummate skill. I believe it took me four summers, raking weeks at a stretch, to learn how to rake a stretch of ground perfectly level. Please do not take this exaggeration. Try it yourself. Rake a piece and then scrape it with a long board. You will quickly notice how many minor depressions, almost unnoticeable to the eye at first, have been sulted. Raking holes is a common fault of the gardener. To avoid them, an even backward movement from the shoulder (not from the elbow) is necessary, and it requires considerable practice to get that. Yet, on the other hand, the raking of your garden depends not only on the germination of the seeds, but, as has been said, on the ease with which subsequent cultivation can be done.

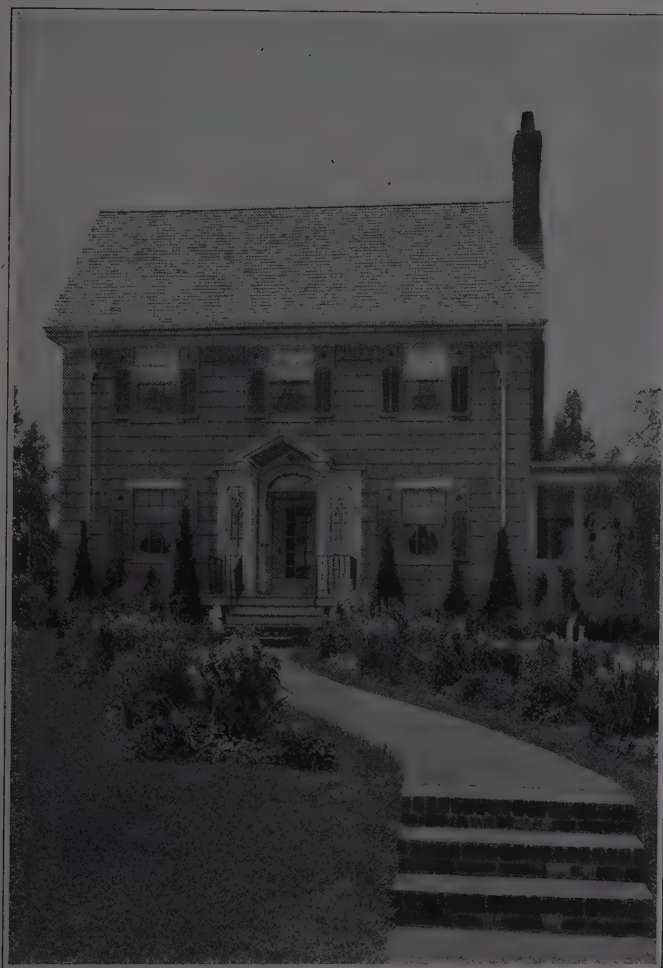
When it comes to the use of a wheel hoe a common mistake made is to take too big steps. Short steps, plus convenient, short, scuffling motions from the elbows (not from the shoulders) will enable you to cover more ground with less becoming tired than if you take long steps. Try to push the implement by sheer force from the shoulder.



This three-pronged short-handled scratch weeder is excellent for work in the border

MAKING the MOST of HALF an ACRE

By AMELIA LEAVITT HILL



The house on the small lot should be placed either close to the street or to the rear boundary, in order to have the available gardening space all in one unbroken plot

THE question of what can be done with a small plot of land, one which, in these days of suburban immigration, presents forcibly to an increasing number of new country residents every privet hedge, a forsythia, a pergola, and a few scattered shrubs of more or less broad tendency solve the problem to parent satisfaction of many of them there is far more than this of pleasure to be had from a suburban plot; and when such tools as plants and flowering shrubs are ready to our hands, why be content with any scheme that does not serve a useful purpose? Our ideas of beauty instead of gratifying those two good but distinct qualifications—neatness and convenience?

A suburban plot of from 100 to 150 feet of frontage on street or road, runs back to a distance of about 150 feet, which will accommodate three-quarters of an acre, and its approach will take up an inconsiderable part, leaving half an acre free upon which the owner may work his will. Upon a 150-foot lot this space will, of course, be somewhat smaller.

There are not already a house on the plot, the owner will find it his while to build either close to the street or close to the rear boundary of his domain. He will leave the full extent of the cleared ground with which to work. If the house is placed far back, sufficient space for a dry-laid garden and for the unornamental but necessary of the kitchen department must be left; if it be placed close to the road these are tucked away at the side, embowered in or concealed behind a lattice or hedge which they will be visible neither from the street nor in the garden behind. The latter method is the better one when it can be employed with the family pleasure grounds into close communication with neighboring laundries and a retreat from the noise and publicity of the street. Thus are built even the smallest of the old gardens, which are girt about with privet hedges so that the passer-by might think them non-existent, and which for that reason afford all the more delightful privacy to the owners and their owners' friends. The very American way of placing the garden house and street gives greater pleasure to the wayfarer and greater beauty to the neighborhood, but is productive of less real comfort to the proprietor.

However the grounds be arranged, let the house not, in the all-too-common suburban style, be set in the middle of the plot. This is no good purpose, and deprives the small-plot gardener of the full extent of his ground upon which to work. The smaller the plot, the more important is it that every part shall be used to advantage.

It is surprising how every undertaking, from the simplest to the most elaborate, resolves itself into a "man with a pick, and shovel," or rather, a man with a stout crowbar,

pick, and shovel. Your woodland or your vacant lot, a few months ago so pretty with wild flowers, berries, and flowering shrubs, or with grass and daisies, is now a mass of down-trodden foliage, rutted deep by teams and piled with stones dug from the foundations, high among which rises the house surrounded by debris—a sight to appall the bravest-hearted landscape gardener. Out of this chaos order is to be brought; and if the task at first seems overwhelming, the greater will be your feeling of contentment when it is accomplished, and the more will you enjoy each additional task which marks the fulfilment of your labor and the attainment of your dreams.

First, men with picks, mattocks, and a few bars of dynamite must be turned into the grounds to clear them. This is a permanent improvement, and one which should be done as thoroughly as possible. Each stone untouched will mar the symmetry of the finished lawn, and the removing of it will then be a more difficult and destructive matter than it would have been in the beginning. If a lawn there is to be, let it be a smooth sweep of green turf, not a grassy stretch studded with rocks, which no amount of vines or flowers will disguise or beautify. To be sure, the removing of them is a heart-breaking task; every stone, like an iceberg, will be found to show only the smallest portion of its anatomy above the surface, and the tiniest point, attacked light-heartedly with a trowel, is apt to uncover indefinite expanses of rock which can be removed only by blasting. It cannot be too strongly laid down as a principle, however, that every rock must be removed if the finished lawn is to be satisfactory.

This task once done, grading is begun. On a level site this is an easy matter. If a hillside be, in question, terraces may be made or bank walls built. The latter are apt to present a rather too monumental appearance, however, unless they are loosely laid and crevices pointing downward be left between the stones, with a view to tamping the interstices later with earth and filling them with rock plants, by which means the bare rock wall may be transformed into a mass of bloom. While grading, the ultimate location of flower and vegetable beds should be considered. Nothing will grow well on a slope; but if the incline be not too great, beds may be marked out and their lower ends built up, with a border of green-painted wood, or of brick or stone, to keep the earth from washing out into the sloping paths beside them. This will in some cases be found to obviate the necessity for terracing—always a lengthy task—or for the stiff and formal wall.

THE question of beds brings up that of soil. When land has just been reclaimed from the primeval forest it seems strange that it should not be at least knee-deep in leaf mold, but this is, alas! all too rarely the case. Still, poor soil need not prevent the existence of the garden, though it may, and will, increase trouble and expense. If the soil be hopeless, when the beds have been marked out they should be dug out to the depth of three feet and filled with loam. A load of loam goes a surprisingly short way, but once done, the thing is done forever, and a proper use of fertilizer and thorough cultivation will keep the beds in good order. Everything of this kind should be done before the lawn is finally seeded and rolled, so that the young grass may not be torn up by intruding carts and horses.

With a very sandy soil, of course, there is little to be done, and with the clay so prevalent in New Jersey (when dry, it cakes to the hardness of a stone) even a lawn may not be had. So the beds once filled, as above described, a top-coating of loam should be given the entire grounds. Forty loads is sufficient to cover half an acre to a depth which will insure a permanent lawn.

Land which has recently been reclaimed is apt to be sour—a condition indicated by its tendency to grow moss. If this is the case, lime should be scattered and left for the rain to wash in. This improves the ground and makes the grass grow more, and certain weeds less, abundantly.

THESE preliminaries accomplished, the owner may turn his attention at last to the beautifying of his grounds. They will probably boast none of the nooks and corners which he will find, with something like despair, advocated by one after another of the gardening books in which he seeks for information. His grounds lie spread out before him for all the world to see; their extent seems suddenly pitiable, and their frank openness to all beholders to put them beyond the reach of art; no nooks, no surprises, no hidden bowers nor suddenly discovered pools are possible to the owner of the suburban half acre.



Even though the plot be small, it need not be deprived of the charm of a pergola. Could anything be more inviting than this vine-covered, flower-decked pergola with the graceful statue in the background?

This state of affairs is, however, far from hopeless, authors of the garden manuals notwithstanding. Surely the old-fashioned garden is an ideal, and the old-fashioned garden should be formal. Nor has the formal garden, admirably adapted to the needs of a small plot, any place for nooks and corners. Arranged in straight lines and geometrical figures, box-bordered in its normal state, it spreads itself out, sparkling in the sun, blazing with color. For such a garden there is ample space in half an acre, or in less than that.

An excellent plan for the formal garden, none the less good because so often seen, is that of two walks crossing at right angles, at the intersection of which stands a sundial, a bird bath, or even a great sun umbrella, screening a group of rattan or white enamel chairs. Upon this as a basis the rest of the garden may be laid out. The squares formed at the corners of the plot by the intersecting paths may, in succeeding years, be divided up into geometrical figures or broken by transverse beds. Everything should be planned in advance, and a definite plan should be followed. Nothing is more inartistic than the all-too-common aimlessly scattered beds which break the symmetry of some suburban lawns. They suggest only the idea that the owner dug holes haphazard into which he inserted plants which at the moment struck his fancy. The formal garden idea is the direct reverse of this, and is effective in proportion as the other is ineffective.

THE vegetable garden is a problem important from the point of view of practical necessity if not from that of the landscape gardener. A plot 40 x 80 feet will be sufficiently large to supply the needs of a family of three persons. For a larger number, or if vegetables are to be put up for the winter, the space must, of course, be increased. By using care in planting and by skilful rotation of crops it is possible to use the same space, several times in one season. By using the ground in this manner, a smaller space may be assigned to vegetables than would otherwise be required. For example, early peas, which should be sown about the first of April, will be ready to pick by the first of June, and by the tenth of June will be a thing of the past. Bush beans, late cauliflower, or brussels sprouts may then be planted in their place, and will come

to perfection later in the summer. In the same way, early crops of bush beans may be sown in May, and the middle of July will see their produce ready for beets, late carrots, corn, or for a crop of peas. It will not be found generally desirable to attempt raising potatoes in so small a plot as half an acre, not all of which is devoted to vegetables. Potatoes require much room, and enough cannot be raised to supply the needs of the household, although, perhaps, for the sake of the idea of "one's own potatoes," some gardeners may enjoy trying a few.

Of all the crops which may be raised in a vegetable garden, asparagus will be found the most worth while. The only objection to it is that an asparagus bed requires patience—if one-year roots be bought, two years of waiting are necessary. The bed should be dug out to a depth of three feet and a layer of small stones spread on the bottom to insure good drainage. Upon the earth is piled, well enriched with manure, and here the roots are planted, about eighteen inches apart. A bed ten feet by thirty will give space for a hundred roots, which will be found an

Truly, just as clothes make the man, so do surroundings make the house. Even though you have but a small suburban house set on a small plot of ground, there is no reason why it should not have all the charm and beauty of the above dwellings.



ty. It should be free from shade and if well exposed to the southern sun. A herbaceous border of tall-growing perennials arranged to shut off the kitchen garden from the wandering eye; a hedge of privet or will serve the same purpose; or a row of raspberries, blackberries, or gooseberries, pretty spring and unobtrusive at other times, can be used in the same way. An effective and appropriate barrier may also be made of espalier trees, which will be at once decorative and

though we are not accustomed to regard a vegetable garden as a thing of beauty, an arrangement there, as well as in the flower garden, will be found productive of good results. The walks be bordered with parsley, behind a row of lettuces are set. The feathery fronds of the asparagus, the striking trumpet-shaped flowers of the globe artichoke, the rich foliage of the tomato, the blossoms of the potato bouquet of which, we are told, was in the early days worn by a French gentleman of the court of France—are all decorative, and, with a little care, be so arranged as

deep sweeps of unbroken lawn border the garden, with planting increase the effect of size on the small place



Another way to obtain seclusion in the garden is by means of lattice work overgrown with vines or with tall planting massed against it



to produce a striking effect, even upon our too accustomed eyes.

ABSURD though it may seem to contemplate an orchard in so small a space as half an acre, even this is possible to the suburban fruit-tree enthusiast. Dwarf varieties should be used for this purpose, which are less long lived than the standard sorts, but which take up less room, and which may be depended upon to produce fruit in two or three years. They may be planted as closely as seven feet apart, and even closer if carefully cut back and tended.

Apart from the hedge of espaliers which has already been suggested as a border to the kitchen garden, almost any fruit tree may be trained into espalier form beside a house or wall, and in this way a larger space for extra trees may be obtained. For decorative effect nothing is more charming than the great golden balls of the apple studding the southern wall of your house, or the pale blush of the peach as it twines about your window.

In planting fruit trees, too, it is important that the soil be well fertilized and the trees carefully set. The planting of an orchard is a matter of permanency, and it is the part of prudence to incur, if necessary, some extra trouble and expense in order to insure yourself against disappointment after the years of waiting which must ensue. For the same reason, it is well worth while to obtain your stock from dealers whose reliability is beyond question. An orchard is not, like a garden, a spot where results are known in a season, and where rectification is a simple matter.

Of course if your whole domain is to be in flowers, more elaborate plans may be carried out. If more of it is to be set aside for kitchen garden or orchard, a fairly satisfactory collection of blossoms may be had by heavy massing in front of the house. Indeed, the "permutations and combinations," even of a half-acre plot, are innumerable. Heavy pergolas, statuary, and other such decorations, should, of course, be rigorously excluded; they are suited only to large tracts of land, and dwarf the small garden into insignificance. It may be laid down as a general rule that much elaboration makes the small place seem smaller; while the man or woman who can keep the small place simple and tasteful has an ally in the flowers and the shrubs.

WALL FOUNTAIN

Photographs by MATTIE EDWARDS HEWITT



An elaborate treatment for wall fountain niche on the William H. Walker estate at Great Barrington, Mass.



Another fountain in the Walker garden is set in a concrete wall. It simulates an open shell, the upper half of which is occupied by sculptured figures, while from the lower half water trickles into the pool below



A composition which uses for its central feature a wall fountain developed in brick and cobblestones. Vines and tall grasses blend the fountain with its forest setting. On the Walter Jennings estate, Cold Spring Harbor, Long Island

DIPPING POOLS

HN WALLACE GILLIES



Framed in a panel of the brick wall, the ornate carving of this marble fountain marks it as classic in conception. The urns atop the wall repeat the marble of the fountain



An attractive wall fountain composition in the garden of J. H. Poole, Esq., at Detroit, Mich.



Dipping pool and fountain against a terrace wall in the garden of Charles H. Sabin, Esq., at Southampton, Long Island. A garden of different levels is always more interesting than one which is flat, and it gives easy opportunities for delightfully secluded spots like this



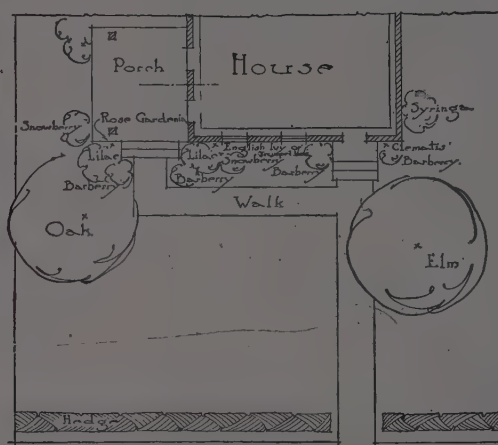
This house (below) is Dutch Colonial in feeling, well-designed so that it is low and friendly in appearance, and it needs very little planting. The shrubs used are those which were found around the old houses, because they not only are good in themselves, but they heighten the character of the house. Boxwood each side of the door, lilac, Japanese quince, and smokebush at the corners, are all that are necessary. The sketch at the right below shows the metamorphosis latent in a few simple shrubs



BEAUTIFYING the HOUSE

Planting by RUTH DEAN, Landscape Architect

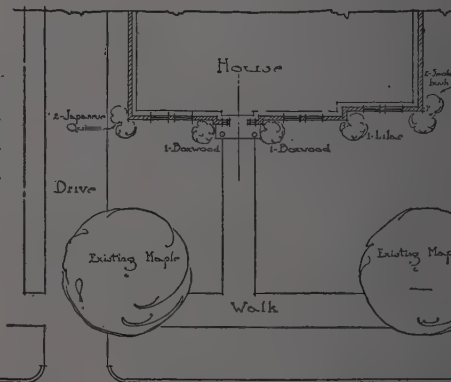
THE general theory on which these four plans are based is the purpose of foundation planting is not to bury the foundation to tie the house gracefully into its surroundings. For this purpose neither a lot of stiff little evergreens, a mass of rhododendron, a hedge of spirea is desirable, but a few shrubs, evergreens, and vines, fully chosen for foliage and general habit of growth the year round, with reference to the window openings, where they will carry the green the lawn up on to the house at such places as there is a big enough surface to need breaking, or a corner to demand softening.



- PLANTING LIST
(for sketch plan at left)
- 1 *Quercus rubra*—red oak
 - 1 *Ulmus americana*—can elm
 - 2 *Syringa vulgaris*—common lilac
 - 4 *Berberis thunbergii*—Japanese barberry
 - 1 *Philadelphus grandiflorus*—syringa
 - 2 *Symphoricarpos racemosa*—snowberry
 - 1 *Rose Gardenia*
 - 1 *Clematis paniculata*—matis
 - 1 *Hedera helix*—English ivy
 - or 1 *Bignonia gracilis*—trumpet creeper

The middle of the lawn is usually a fatal spot in which to plant a tree. In this case (see photograph at top of page) what little lawn space there is, is cut up, and the house itself awkwardly divided in the middle. The better way is to plant two trees to frame the house, dissymmetrically with respect to the house. Reading left to right, the planting is as follows: a climbing rose, *Gardenia*, to make use of the pergola ends which decorate the roof of the porch. This rose has besides a delightful flower, a sizable leaf that lasts until Christmas or later. Next is a lilac in the angle formed by the steps, and one on the other side of the steps to soften the junction of the porch with the house. Lilacs have fine, dark green foliage, and in winter the twigs are colorful and interesting in their habit of growth. Barberry used at the base of the lilacs is also a good all-year-round plant. In winter its bright brown twigs with their burden of berries is a pleasant supplement to a cheerful summer green. A snowberry continues the group back to the wall and an English ivy, or trumpet vine, should ivy prove tender, carries the green of the bushes up above the window. The sketch at the left shows the effect when the planting has matured

- PLANTING LIST
(for sketch plan at right)
- 2 *Rhus cotinus*—smokebush
 - 1 *Syringa vulgaris*—common lilac
 - 2 *Cydonia japonica*—Japanese quince
 - 2 *Buxus sempervirens*—boxwood

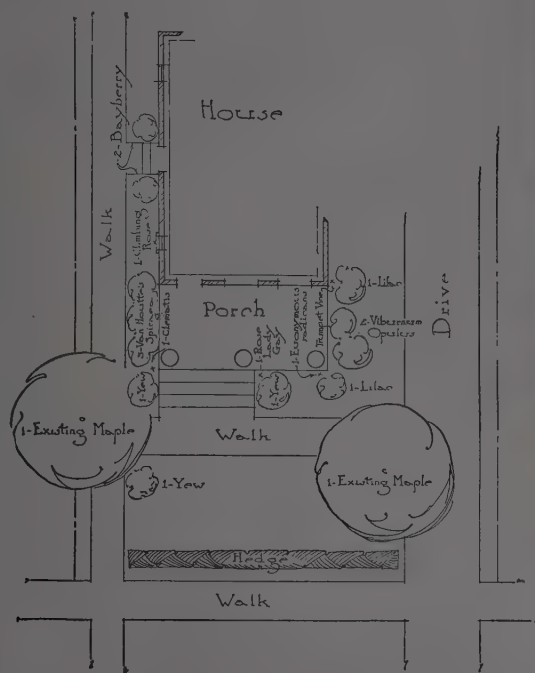


CAREFUL PLANTING

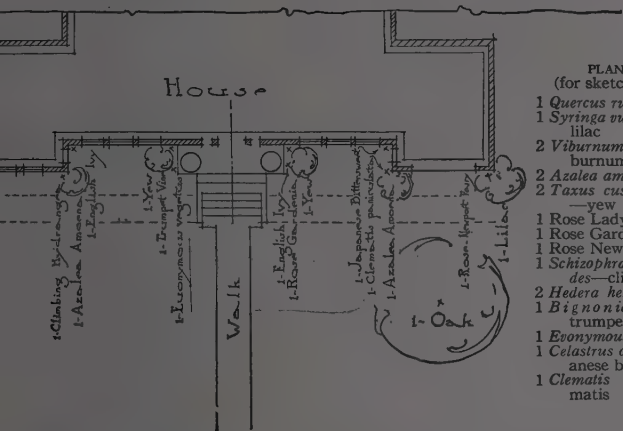
Plans by BEARSE & GUPTILL

PLANTING LIST
(for sketch plan at right)

- Quercus cerifera*—bayberry
- Taxus cuspidata brevifolia*—yew
- Syringa vulgaris*—common lilac
- Rumex opulus*—cranberry bush
- Euonymus alatus*—Van Houttei—Van Houttei's spirea
- Bignonia grandiflora*—trumpet vine
- Euonymus radicans*—alis paniculata
- Euonymus alatus*—Lady Gay
- Euonymus alatus*—wing rose



The house (upper right-hand of page) appears to have the garage on one side and the kitchen door on the other side of the building, with the main steps toward the kitchen side. In order not to make three breaks across the lawn, therefore, the drive and the walk to the kitchen door are connected with a cross walk, and the pedestrian can take his choice of approaches to the front door. The two trees are very well placed, albeit there are more dignified trees than Norway maples. Tall, flowering shrubs at each end of the porch shut it off from the walk and drive, vines are planted to wreath the columns and cover the pergola ends, and a spreading yew each side the steps and one at the juncture of the two walks provide some evergreen planting for winter effect.



PLANTING LIST
(for sketch plan at left)

- 1 *Quercus rubra*—Red oak
- 1 *Syringa vulgaris*—common lilac
- 2 *Viburnum tomentosum*—viburnum
- 2 *Azalea amana*—azalea
- 2 *Taxus cuspidata brevifolia*—yew
- 1 Rose Lady Gay
- 1 Rose Gardenia
- 1 Rose Newport Fairy
- 1 *Schizaphragma hydrangeoides*—climbing hydrangea
- 2 *Hedera helix*—English ivy
- 1 *Bignonia grandiflora*—trumpet vine
- 1 *Euonymus vegetus*
- 1 *Celastrus orbiculatus*—Japanese bittersweet
- 1 *Clematis paniculata*—clematis

This house (below) is a difficult one because it needs planting badly, but, on account of the numerous windows and narrow terrace, provides very little space in which to do it. The pergola ends applied over the windows as decoration, with no way for the vines to reach them, suggest the advice that the owner of this house should plant some "athletic vines" as soon as possible, and then coach them carefully to make the ends of the pergola. A vigorous shrub at each outside corner, with lower spreading shrubs like *Azalea amana* at the inside corners of the two wings, spreading yews in the angles of the entrance porch, and vines—as many as possible evergreen—comprise the planting for this house. A tree at the base of the terrace near the sun porch would help to soften the jump between main mass and wing.



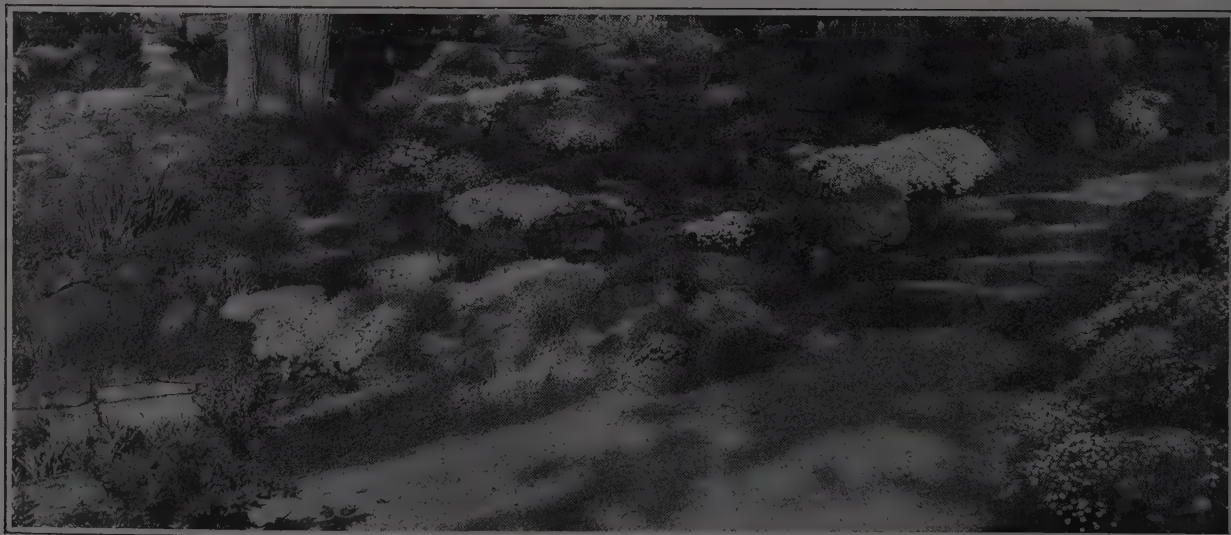
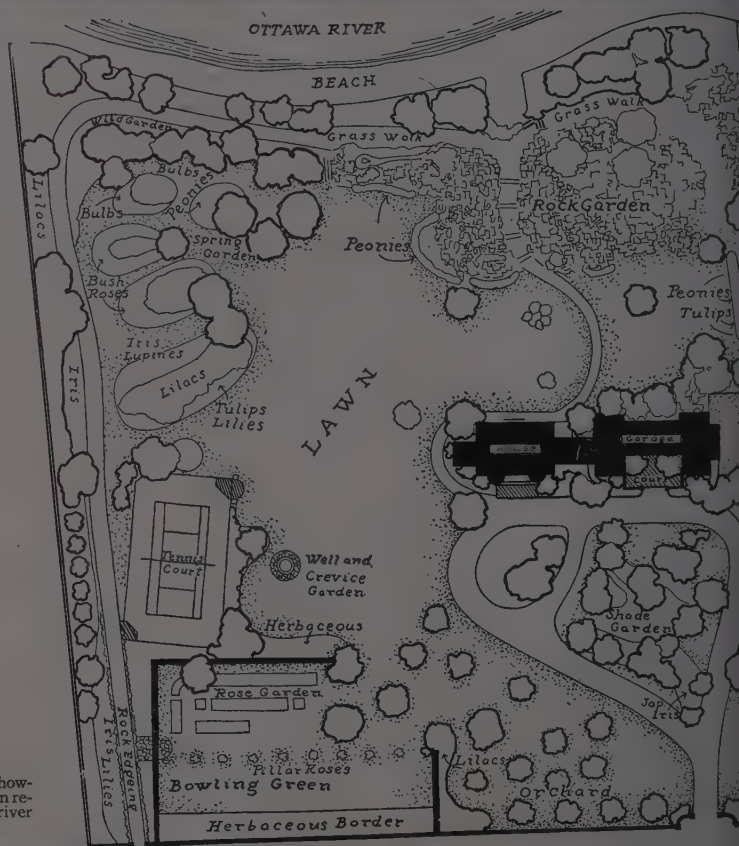


In late May. In the foreground, on the pathway, is the dark green of crimson thyme; above, creamy double arabis, looking like small stocks. On the middle ledge is the lemon yellow of *Erysimum pulchellum* and white iberis just opening. Back of this is a stretch of lilac-blue *Iris cristata*, and above a mass of the blue moss phlox G. F. Wilson. Clumps of the red columbine just show at the top, while the little tulip *Boulton d'Or* is sprinkled along the middle ledge. The shrub at the left is *Berberis Thunbergii*.

The ROCK GARDEN
of
F. CLEVELAND MORGAN
Esq.,
AT
SENNEVILLE, P. Q.
CONTAINS MORE
THAN 500 VARIETIES
OF PLANTS

Photographs by W. J. TAWSE and SMEATON BROTHERS

Layout of the Morgan place, showing location of the rock garden in relation to the house and to the river



In the rock garden toward the end of May, masses of moss phlox, androsace, saxifrages, etc., are in bloom against a background of the gray foliage of cerastium, the leathery leaves of auriculas, and the blades of bearded iris, enlivened by the purple of unfolding mahonia



Dappled sunlight. The too close proximity of trees in a rock garden is inadvisable, owing to the fact that the roots work their way into the earth pockets, but some protection from the full sun is necessary over part of the garden



pond and rocky bank here have not celebrated their first birthday yet. The garden is planted with briar roses, trailing rugosas; the shrubs include thorns, and the pond contains many kinds of bog plants

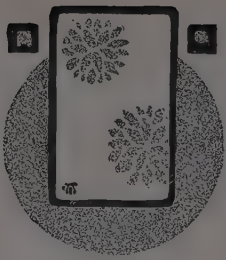
In late summer the rock garden is reduced to greens and blue, yellow, and gray for its color scheme, obtained through clumps of late perennials and carefully selected annuals



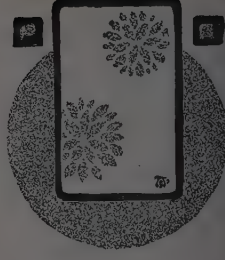
Looking toward the house from the rock garden. Late summer



A rocky bank above a pool



Buds beginning to show color. At this stage it is time to remove the manure mulch and stop feeding



The CHRYSANTHEMUM— the PERFECT FALL FLOWER

By *CARL STANTON*

TO THE lucky lover of flowers who is fortunate enough to own a greenhouse, large or small, November can be made one of the most enjoyable and profitable months of the entire year. One is indeed fortunate who can while away the hours of a chill November day in a greenhouse full of chrysanthemums; for, with their superb forms and delicate colorings, they are truly the monarchs of the fall.

To raise chrysanthemums successfully requires a thorough knowledge of their growth, and a constant attendance to their needs. The best location for them is, of course, the correct type of greenhouse or conservatory. Here, grown with care, they are at their best, as it is much easier to supply the correct temperature and ventilation in such houses than in any other place they may be grown. The coldframe is the second choice; and I have seen some very fine blooms of the earlier flowering sorts that were grown out-of-doors. However, the vicissitudes of the weather are too much for them during most years to count on getting good blooms out-of-doors; seasons of excessive moisture will give diseases a chance to obtain a foothold; high winds and heavy rains will take their toll; and the chances are that before blooming time, a heavy frost will wipe out the whole crop, unless some means is taken to prevent it. Occasionally one will find a place out-of-doors where it is possible to use a canvas roofing during stormy weather, where the plants will be sufficiently protected from the wind and cold to mature their blooms in good shape.

While I will speak only of the methods used to grow chrysanthemums in the greenhouse, one can adapt these



Seedling chrysanthemums bloom earlier than the larger varieties



A single bloom of Smith's Imperial. If grown with care each plant can be expected to produce two blooms eight inches across

methods to fit the place he expects to grow them. Grow the plants in a raised bench if possible, as one has a better control here of the feeding and the soil-moisture than when they are grown in solid benches. Two benches is high enough for the top of the bench one can easily work around the plants at this height, and yet the flowers will be displayed where they can be seen when they bloom. Do not have the benches more than three feet (three is better) wide, as the air will not get a chance to circulate through the plants if the bench is wider.

For the soil I would recommend any good garden loam that is not too stiff and sticky. I know that it sounds like heresy not to advise the use of a mixture of loam, manure, sand, etc., but these plants do not require very rich soil for the first part of their life, and many of the failures in growing them can be traced just to this point. I plant and grow all of my leguminous crops (beans, peas, etc.) in one section of my vegetable garden; then, before freezing weather sets in, I sift this soil to take advantage of the nitrogen nodules that the bacteria affix to the roots of these crops. I always sift the soil because it looks so much neater in the greenhouse, and there is less chance of finding the benches with cutworms and larvae of destructive insects.

Early in the spring, before the plants are set, mix in some bonemeal. Your chrysanthemums become only plants that you raise in this soil, and allow them to fresh supply each year.

The beginner, who never grown any chrysanthemums, will have to give his plants the first season unless he has some



Louisa Pockett, a mammoth white variety which reaches a diameter of ten and a half inches under proper conditions

neighbor who is overstocked with them. The price of the plants varies from twenty-five cents to several dollars each. Order them between the middle of April and the first of June; as a rule, the earlier plants will make the better flowers.

If you have kept some plants over the winter, they can be taken out of their winter quarters about the middle of March. The new plants are the suckers at the base of the old flower stalk. Some of these will be found to have roots of

own if they are carefully pulled away from the parent plant, may be set directly into three-inch pots filled with the soil bed above. Those not so rooted will have to be planted (harshly forced) into sand until they form roots. If the temperature of the greenhouse is maintained at 50°, and that of the a few degrees higher, this should happen in about three . Pot up in soil as soon as the roots are formed, as leaving plants in the sand too long will stunt their growth.

Between the middle of May and the first of June the plants are transferred to their permanent places in the benches. Set them an deeper than they were in the pots, being sure that they are in nt rows. They may be planted as close as eight inches each but they will retain their foliage better and keep freer from e if a foot is allowed between them. Keep together the vari- at bloom at the same time, as this facilitates later treatment; et the shorter kinds have the front row where their blooms ow to advantage.

Immediately after transplanting, apply plenty of water to the surrounding the plants, but do not water the spaces between

Plants will take hold much more quickly in an open, porous an they will in a heavy, water-soaked one.

er three or four days the soil in the whole bench may be ed. Water as early in the morning as possible so that the air house will be dry by night. Never let the soil become very it will cause the plants to become "hard," a condition which y undesirable; and yet, on the other hand, excessive watering ust as much harm. Do not water every day, but only on days when the soil needs it; then water thoroughly. Make le never to water on rainy or foggy days, unless such weather ues for a protracted period and there is enough heat in the to dry out the soil; then, of course, it may be necessary to but care should be taken to wet the foliage of the plants and alks as little as possible.

THE chrysanthemum is a plant that dislikes excessive heat. In the spring when the plants are first started, a temperature of 50° to 55° during the day, and of 45° at night will be about if the cuttings have a little bottom heat.

During the summer keep the house as cool as possible. To do apply to the glass roofing a mixture of the following: two quarts slaked lime, two handfuls fine salt, water to make the whole the tency of cream. Apply to the glass (on the outside) with a rush, selecting a sunny, dry day for the operation. With dry weather, one such coating will last a whole season. Be- of putting it on too thick, as it will make the greenhouse so that the plants will become drawn and spindling.

On hot, sunny days syringe the foliage of the plants and water

the paths and inside walls of the greenhouse, and if possible the grounds immediately surrounding it, allowing time for them to get dry before night.

Have all the air circulating around the plants that it is possible to have. Tie them to prevent breakage, and then allow the wind to blow right through the house, as this will help to keep away diseases more than will any other thing. This is as true at night as during the day, but one must take precautions to prevent sudden winds and thunderstorms from doing damage.

As fall approaches beware of sudden changes in the temperature of the house, as these will favor the growth of mildew on the leaves. I never bother to start a fire unless there is considerable wind blowing and I think that the temperature will go below 30° outside, as these plants will stand it as low as 40° inside. For fall temperatures I would recommend 60° to 65° in daytime, and 45° at night. More heat will cause the flowers to open sooner, but they will not have the keeping qualities that coolhouse flowers have. If you intend to keep the plants over the winter in the greenhouse, it is only necessary to keep them from freezing—about 40°.

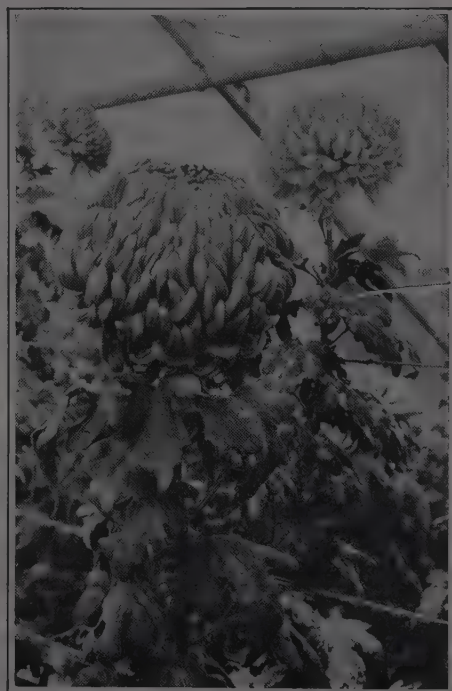
During cool weather keep enough heat on so that the ventilators may be kept open an inch or two to allow the escape of any excess moisture, without lowering the temperature of the house too much.

Chrysanthemums have two kinds of flower buds, crown and terminal. The crown buds are single flower buds, surrounded by others that are not flower buds; while terminal buds are really groups of flower buds, and are the last effort of the plant to bloom. The former come early in the life of the plant, each plant having two or three at different times. Crown buds will make better flowers of most varieties than will terminal buds, provided they come somewhere near the time to select the bud for that variety.

From the first carefully rub out all side buds as soon as they appear. Do this consistently twice a week throughout the entire growing season. To obtain flowers of large size, the plants must be run to one stem and one flower, but if more are wanted, pinch off the top of the cutting when setting it into the permanent bench, and allow the two strongest side buds to grow to make the plant. When the first flower bud appears, carefully break it off; choose the largest of the other buds to continue the growth, and rub out the rest of them.

Each variety of chrysanthemum has a date, when, to obtain the best flower, its bud must be left to bloom. This date may be found in nearly all of the catalogues of chrysanthemums. For instance, with the variety Marigold, a flower bud selected August 20th to continue growing will make a better flower than one allowed to grow during July, or one held back until September. In this case if a crown bud appears during July it should be pinched off, and the largest side bud allowed to continue the growth. In about three weeks another bud will appear. If it is

a terminal bud, it must be saved regardless of month; but if it is a crown bud, appearing, let us say, about the fifth of August, it should be pinched out. If it should be as late as the fifteenth, however, it would not be advisable to break it off, as the next one would not appear until sometime in September. When a bud does come too early it can be slowed up by allowing the side buds to grow for a while, taking them off one at a time



A ten-inch yellow bloom of Corp. J. Fred Piper—illustrating the method of tying with strings run horizontally along the rows

until only the flower bud remains at the date of selecting.

If by any chance the terminal bud that you have selected should get damaged, do not immediately take out the plant, as very often a bud will appear part way up the stem that will develop into a satisfactory flower.

To fasten the plants so that they will stay up, without making the house appear untidy, is quite a problem. Personally I prefer to run twine parallel with the rows and tie each plant securely to it. This method calls for a stake at each end of the row to fasten the strings to, and also one about every six or eight feet along the row to give stability to the whole. The first string is put on when the plants are ten inches high, and each successive string is placed a foot higher than the last.

Many growers use a stake for each plant, but this seems to add a great deal of extra shade. Upright strings, fastened to the base of the plant at one end, and to some support overhead at the other, may be used by fastening the plants to them as to stakes. My objection to these is that the string must pass so close to the flower that it is liable to injure the petals.

The greatest factor in the making of extra large blooms is in the feeding of the plants. Six weeks after setting the plants into the benches apply a one-inch mulch of well-rotted manure to the entire surface of the soil. Best results are secured when this mulch consists of dried cow manure obtained from a pasture. Avoid fresh manure of any sort as it softens the plants and spoils the flowers. If cow manure cannot be obtained, use the same amount of horse, a little less of hen, or about a half inch of sheep manure. This mulch will supply a little plant food each time the bed is watered, and will help to retain the soil moisture.

Once every month apply a thin coating of some form of slaked lime to the surface of the soil, or the mulch, as the case may be, and water it in. This will keep the soil fresh and sweet.

When you have selected the final buds it is time to commence the real feeding. The best possible material for this is liquid cow manure, consisting of one forkful of manure to a half-barrel of water. Let it steep for several days and apply it to the beds after they have been watered with clear water. Liquid horse manure (made in the same way) is the next best choice. If only commercial fertilizers can be obtained, select one that carries a low percentage of nitrogen in comparison with the other necessary elements, dissolving a tablespoonful of this in a ten-quart pail of water.

Feed the plants every week or ten days (unless they show signs of becoming soft) until the flower buds begin to show color, then stop all feeding and remove the mulch. Feeding after the buds show color will nearly always ruin the flowers that follow.

When feeding stops there is nothing extra to be done except to keep a watchful eye for side shoots and for suckers at the base of the plant, removing them as soon as they are found. Allow plenty of air circulation in the house, and keep it cool.

RED spiders will not appear to any extent if the foliage of the plants is syringed every sunny day during the summer. For aphids, spray with nicotine sulphate before the flowers come, and fumigate with



The greatest factor in the making of extra large blooms is in the feeding of the plants. A collection of blooms grown by the author, running from eight to twelve inches in diameter

If the petals of the flowers suddenly wilt and rot it is due to too much heat, or to the fact that the plants were fed too heavily of commercial fertilizers. Carefully pull out each rotted petal to prevent the spread of the rot, and keep the greenhouse cool. Avoid letting any moisture collect on the flowers, especially as they are opening, as it is liable to cause heart-rot. If a warm spell comes late in October and it seems as though the flowers will rot, use an electric fan to stir up the air around them.

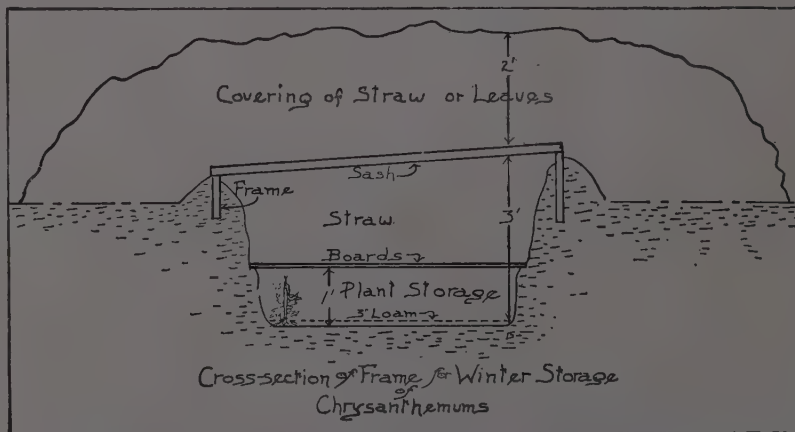
The easiest way to winter over the plants is to replant them in fresh soil in a cool greenhouse where it is possible to maintain a temperature of 40°. Another way, nearly as satisfactory, is to heel the plants into the earth floor of a cool cellar of about the same temperature.

I have kept hundreds of plants over the winter in a three-foot deep coldframe. Plant them in the bottom, allow an air space of a foot over them, and fill the frame with coarse hay. Over the sash place another coating of hay two feet deep, allowing it to extend for a distance of three feet over the surface of the soil around the frame. Put the plants into the frame just before a cold spell of weather is expected, so that the air of the frame will keep cool enough to check the growth of the plants. Plants so kept should not be placed directly in the sun when they are taken to the greenhouse in the spring; but should be shaded for several days, until they get used to the light. Probably such plants would not have as many short stocky suckers to use for cuttings as plants that were wintered over in a greenhouse, but considering the difference in the cost of keeping them, one would be satisfied to get three or four strong cuttings from the coldframe plants.

A light coating of lime applied to the glass (as suggested above for summer shade) when the flowers are commencing to open, will preserve their colors. Direct sunlight will fade some of the more delicate shades to a considerable extent.

Suckers appearing early in the life of the plant may be carefully pulled off, rooted in sand, and then potted up into four-inch pots. They will bloom during November, not very large to be sure, but just right for the house. After the flowers are about half open, it is all right to leave any suckers that may appear at the base of the plant, as they will not take much strength from it, and you will have a few more plants for the next year.

When flowers are cut for the house, cut the stem only as long as actually needed, leaving the rest of it uncured. Side shoots will appear on this stem and will develop into fine little flowers for decorative purposes.



THE present-day desire for remodeled and reconstructed old houses of good Colonial design has, in a measure, brought back to us the charm and simplicity of those earlier days when beauty and utility went hand in hand. With the demand for this type of house comes the desire for a garden which will be in keeping and in character with it, so we turn back to consider the quaint old gardens which were the joy of our grandmothers. We admire their staidness and simplicity, lighting in the old garden favorites which have survived the passage of time and are able to trace their unified ancestry to seeds and bulbs secured under many culties to enhance the beauty of those gardens in a new country.

The Colonial garden was usually in close proximity to the house.

There were two good reasons for this: one was that the cultivation of it depended upon the moments in the day which the busy housewife could spare from her many household tasks in order to work among her flowers and keep it neat. The other was that a garden near the house was more easily utilized as an outdoor room, a place to rest a bit while doing some small household task, darning perhaps, or to have tea with a neighbor, or to keep a watchful eye from indoors when the children went out to play.

The stern religion of the very early settlers forbade gardens for pleasure, but fortunately when gardens escaped this ban by their practicality. Many of the pleasing Colonial examples of gardening had birth in such a humble manner, for as the spirit of the times grew less stern these little gardens were added to, until the host of flowers far outshone the more humble vegetables.

At the same time many of these quaint little gardens, which make such admirable settings for Colonial houses, had their beginnings in the formal borders which lined the still more stiff formal approach to the front door, leading across the little fenced-in "front yard," and used only on state occasions, such as the minister's or funerals. Time changes all things, and so these little gardens gradually lost their stiff primness and took on the quiet and kindly dignity of our mistresses, qualities which in spite of present-day fashions and appearances we still admire and strive to obtain in the present gardens of Colonial spirit.

The design of these gardens of the olden days was usually very simple, a favorite form being a broad grass path or panel, banked at either side with masses of flowering things, and terminated by a gazebo—a garden house—or by a pair of quaint and simple design, usually in keeping with the architecture of the house, although sometimes it was built in the rustic manner and thatched. In other instances the design was more intricate, with paths more narrow and laid in accordance with a set design, usually around some central motive, such as a sundial, a sun-dial, or a large tree with a garden arbor around its trunk; or perhaps the much used summerhouse was located in such a spot, where it could command a view in all directions.

These summerhouses or arbors were the parents of the popular pergola, and were usually of very simple construction, but with a kindly care of



The GARDENS of our GRANDMOTHERS

By H. STUART ORTLOFF

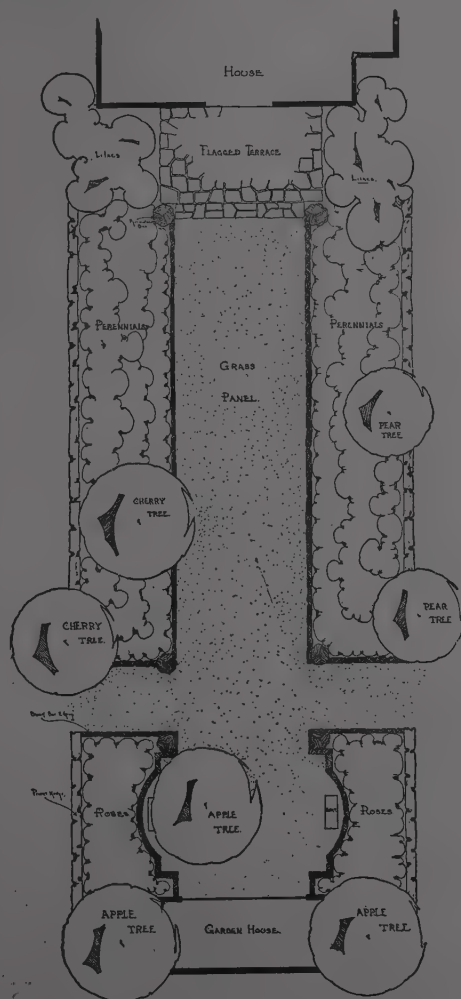
details in post, rafter, and finial which put them in a class by themselves far above the machine-made things of the present. Such houses provided ample shade for comfortable furniture,

more permanent air about them than many of the gardens we see to-day, which are apt to appear flat and uninteresting, not only because they lack the dignity and age of these old gardens, but because they do not depend upon their simplicity for their charm.

The broad panel or central path, in fact nearly all the paths, were bordered with box, whose pungent odor and evergreen beauty have long made it a favorite for edgings, and in its old and rugged age it still marks the boundaries of old gardens; in many instances it has become so overgrown that it has crowded out both path and bed. Sometimes it was impossible to use box, and low-growing plants were used as substitutes. Creeping phlox, grass pinks, with their dense tufts of gray-green foliage, or even the shrubby aromatics, so dear to the hearts and essential to the welfare of our ancestors, such as thyme, savory, lavender, hyssop, and sage, were close clipped into tiny hedges to stem the tide of bloom which otherwise might overflow and fill the pathway.

Behind these edgings ranged the old-time favorites, each with its attendant tale of interest concerning whence and how it came to be among its gay fellows, for it was the custom to exchange slips and seeds, and presents of bulbs and new plants were always esteemed. The present-day nursery which supplies our wants being almost unknown, it was difficult to obtain new and interesting things.

Around the whole garden, in order to make it more secluded and adaptable to the intimate life of the family and friends, and also to keep out stray dogs or cattle, was a fence, wall, or hedge. The fences of those days were usually of pickets; in a few instances walls of masonry and brick were used, but for the most part the walls were low, four or five feet in height, and made of the rough boulders and rocks from near-by hills and farm lands. These were fitted together with such skill that many of them have withstood the rigors of passing time and still stand as landmarks of garden progress, and memorials to the skill of the old time workman. Vines clambered over these walls and small plants sprung from crevices, where some wind-blown seed had found a lodging, and covered the bare rocks with garments of soft green and gay color. Hedges were not common in the very old garden because it was rather difficult to secure adequate material for them. Privet was not common until much later, although it was used and grew steadily in favor, but lilacs, rose of Sharon, and other shrubs were used more or



Plan for a paneled garden in the Colonial manner



The Colonial garden was usually in close proximity to the house, and boxwood—either as bed borders, specimen plants, or both—was a prominent and enduring feature

been prized not only for their range of color but also for their brilliant blaze of autumn bloom.

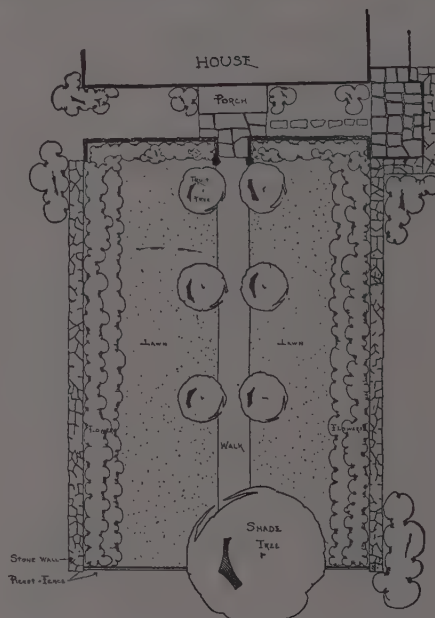
The middle ground of these old gardens was made gay with peonies, iris, phlox, lychnis, all of which have been developed into larger and more beautifully colored flowers, still maintaining, however, their proud Colonial ancestry. Wall flowers with their yellow, red, and brown flowers, and the sweet scented gas plant, fraxinella, were there in numbers, and it is sad to feel that these are fast disappearing through lack of use.

Lilies were exceedingly popular; there were not as many as we have to-day, but it is possible to include all of the hardy ones in our list, for the tall stems adorned with delicate blooms were treasures often procured from distant parts by the old sea captains, and even the native wood lilies were transplanted into the garden. There were large clumps of the day lily in many New England gardens, and in some places it has escaped from cultivation and strayed far along the dusty roadside. Roses there were, but not in the profusion of varieties as we know them now, for there were no hybrid teas or perpetuals. The York and Lancaster roses with their red, white, and particolored blooms, the hundred-leaved rose, *Rosa centifolia*, the old damask rose, and the cabbage rose found favor. Imagine the rapture that Los Angeles or Ophelia would have created.

The lesser plants behind the trim borders in the old gardens were such things as pansies—Johnny-jump-ups they were then called—four o'clocks, pinks, poppies, ten-week stocks, grass pinks, asters, candytuft, and balsam, but we have hundreds more to use and fill the spaces between the large plants with myriads of bloom. Nasturtiums, heliotrope, petunias, marigolds, and all the rest would have created a mild sensation in our grandmothers' day.

Bulbs were greatly valued, but unfortunately only a few tulips, narcissus, crown imperial (*Fritillaria imperialis*), snowdrops, and grape hyacinths were known. There were no Darwinians, no vast procession of daffodils, no hyacinths as we know them, yet had there been they would all have found a ready home in some trim Colonial garden, where they would have ordered out in stern winter and ushered in delightful spring much earlier.

So it is not the plant material which makes a successful old-fashioned garden, but rather the spirit in which we plan and plant it. It is the simplicity and feeling which we put into the design. It is the personal, loving touch which we bestow on each growing thing which brings to mind the sweet, simple dignity of Colonial days, and creates for us the proper atmosphere and setting for our home in Colonial taste.



Plan for a forecourt garden evolved from a Colonial dooryard



In designing old-fashioned gardens new varieties should not be excluded. It is the spirit rather than the letter—the old-time atmosphere—that we should seek to reproduce, making use of present-day improved descendants of our grandmothers' flowers

less successfully. Box was given the place of honor in evergreen hedges, but it was only in the South that it grew luxuriantly and with sufficient rapidity to be effective; but cedars, hemlock, and arborvitae attained prominence in the North as substitutes. Nowhere were these hedges as effective or as much in keeping with the times as the fences, which when wreathed in vines became quite gardenesque.

INSIDE the fence or hedge were placed the taller growing things, the snowball, calycanthus, with its odd brown blossoms and pungent odor, purple and white lilacs, with here and there a Persian variety, the sweet scented mock orange, the rose of Sharon, and in many instances native shrubs from the woodlands—viburnum, clethra, sumac, azaleas, and many others. Our Colonial forebears were very early in not only appreciating native flora, but in realizing that there was a demand in Europe for such oddities, and many a ship carried over a snug bundle of plants in exchange for Old World seeds and plants, and other necessities.

These tall flowering shrubs made excellent backgrounds for the display of the perennials which were planted in front of them. It is impossible to enumerate all of the things which were planted, many of them having disappeared or been so changed by the hybridizer that they are unrecognizable, but there are many survivors which are still reigning favorites. It is, however, a mistake to seek only for the flowers our grandmothers knew, for they were very progressive ladies for their times. They searched long and laboriously for the best within their means in order that their gardens might be more complete and more beautiful. Because they, for instance, only knew the flaunting red "piny" is no reason why we should not use the soft creamy whites and delicate pinks which the horticulturist has developed in this flower. You may rest assured that if these had existed a hundred or more years ago our grandmothers would have left no stone unturned to avail themselves of such wonderful treasures.

We should, therefore, in designing old-fashioned gardens, not exclude the new varieties; we should endeavor to catch the spirit in which our grandmothers gardened. One of the ways to do this is to consider plants in groups and to select from our present-day store like material so that they will blend together with the old things and not seem new and obtrusive. For instance, in the old days the back of the border was made gay with the spires of hollyhocks, foxgloves, garden heliotrope or valerian, and wonderful masses of larkspur, sweet rocket, perhaps the taller growing veronica, and Canterbury bells. To-day we might add to these the heleniums, the tall chimney flower, the aster (that is the perennial sorts), and all the hardy chrysanthemums; such things would have

A GARDEN OF CLASSIC DESIGN

Is that of R. A. Rowland, Esq., on his Estate at Rye, N. Y.

DWIGHT JAMES BAUM, Architect



A point of interest in the garden is this Italian well-head of imitation travertine located over an old well discovered after being covered over for thirty years



Detail of pergola at one end of the east flower garden. The oil jars which flank the marble seat are in blue-green glaze and stand on ivory tripods



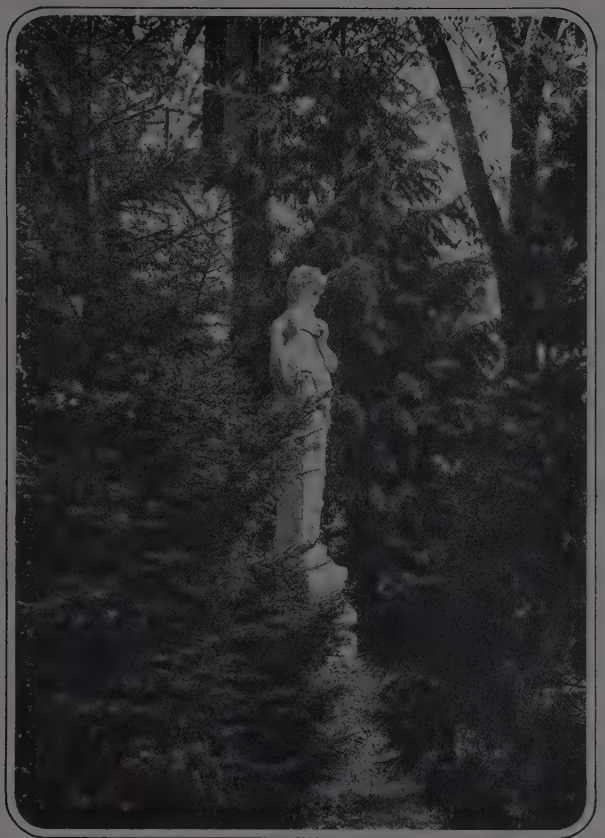
A sculptured vase ornamented with dancing figures and stork handles, modeled by Carl A. Heber, forms the *raison d'être* for this gazebo near the rose garden



The sunken garden on the west. The tea house (left) stands at the end of the swimming pool and contains dressing rooms. All of the planting, including many large trees, is only a year old



A classic vase on a pedestal, copied from an antique model, marks the end of the east flower garden opposite the pergola



At one corner of the place a small circular stretch of greensward is occupied by a statue of Pan facing a curving garden seat



A naturalistic pool made by piping drainage water to a low spot on the property. Most of the trees and all of the water plants were transplanted here just four months before this picture was taken



A HANGING GARDEN of MODERN BABYLON

The famous hanging gardens of old are to-day being emulated in the growing practice of putting gardens on the tops of skyscrapers in New York and other cities

WARREN & WETMORE, Architects

JOHN R. TROY, Landscape Architect

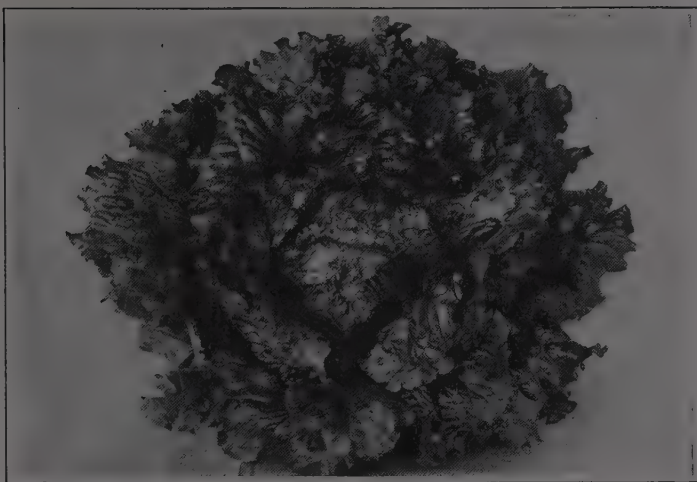
Photographs by FRANK F. EVANS

Below is shown an inviting corner of the "grounds" of the palatial bungalow that tops the Shamokin Apartments building at Seventh Avenue and 57th Street, New York, which is occupied by the building's owner. Two feet of soil underlain by a solid layer of drain tile provide almost *terra firma* conditions for the varied collection of choice evergreen trees, shrubs, and vines that make this 1,500 square feet of city roof area a real garden of year-round charm. The twin retinosporas in the background are about fifteen feet tall, and balled and burlapped for transportation from the nursery they weighed about two tons apiece; consequently the problem of raising them from Seventh Avenue to the roof was a difficult one. The stepping stones in the foreground lead from the house entrance to the terrace, shown above, which borders 57th Street (twelve stories below). Arborvitae, evonymus, and English ivy deck the stucco walls of the bungalow between the classic Italian panels, and dwarf box edges the border in which kalmia, mahonia, vaccinium, azalea, specimen box, and other evergreens provide a perpetual background of green against which lilies, chrysanthemums, dahlias, tulips, celosia, and a host of other herbaceous annuals and perennials create appropriate effects with each of the changing seasons





The Chinese cabbage Wong Bok is really a mustard and should be eaten raw as a salad



New York or Wonderful Crisphead (also known as Los Angeles Market) lettuce holds the record as a heat resister

DOES the SMALL

By ADOLPH

PHATICALLY yes! It pays threefold. It pays in the value of crops actually gathered; it pays in superior quality of product; and it pays in satisfaction of the edge that the product is of a freshness un-
able in the market at any price.

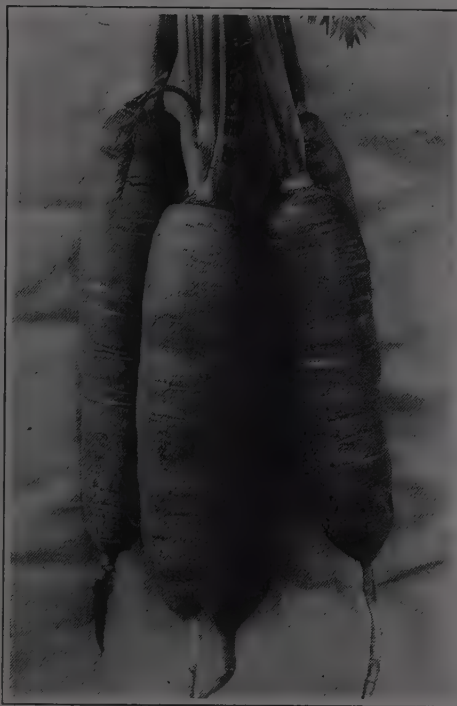
trio of factors back of every successful garden is intensive cultivation, a knowledge of soil, and a disregard of all sentiment. If a garden has yielded 75 per cent. of its crop, waste is a lament on balance due if your programme is to succeed as a succession crop from the same space of ground.

There are scores of different varieties of vegetables, but for the small garden only three or four deserve consideration. I would rather see a garden in which every square foot of ground is properly utilized, than a garden of generous proportions, half of which is devoted to weeds each season.

Nothing illustrates the points mentioned so thoroughly as an actual record, let me give the season's showing of a garden 75 x 100 feet. Deducting about 15 feet in width for paths and fundamentals left a space 60 x 100 feet for crops. The object was to grow liberal crops of such vegetables as the family likes, an abundant supply might be had for daily use, besides leaving a surplus for canning. Year after year out, our most dependable garden crop was to be tomatoes. The last ten years when the usefulness of this most important vegetable fruit broadened immensely. Special selection of early varieties selected for hardiness, like its culture possible in higher altitudes farther north than was considered possible a few years ago. Thus, there is a special variety of Adirondack Earliana that will mature in the almost incredibly short time of eighty days from sowing seeds.

A perfect quartette of well-bred sorts that did us during 1922 consisted of Early Avon, Livingston's Globe, Livingston's Stone, and Livingston's Coreless. These bear the bulk of the crop within 90, 110, and 120 days respectively. That does not mean, however, that Early Avon is bearing after 95 days and the first fruits gathered within 90 days after seeds were sown. The number of days mentioned rather than the climax, in the bearing season of the crop, with a logical prelude and seasonable

number of plants set out, of the different



Amsterdam Forcing, a handsome carrot of great earliness and beauty

varieties mentioned, together with the approximate crops, ranges as follows:

Early Avon	12 plants	100 pounds
Livingston's Globe	50 "	600 "
Livingston's Stone	25 "	250 "
Livingston's Coreless	25 "	300 "

The space occupied measured 15 x 80 feet. Every plant was trained to a six-foot stake, three leaders per plant, while all side shoots and suckers were removed during the season.

It is only fair to mention that neither Globe nor Stone bore a normal crop. Either variety would ordinarily yield an average of twenty pounds per plant. But a severe drouth (thirty-five days) hit the later settings of Globes and the early setting of Stone plants, seriously injuring the plants and thus the crop. The irrigation

THERE is a well-known advertisement that runs: "Don't envy a good complexion, have one." Similarly, don't envy your neighbor his luscious vegetables; read this article and grow your own.

VEGETABLE GARDEN PAY? KRUHM

system does not reach the tomato patch. Besides, I have never known cold showers to benefit greatly the tomato plant.

I have learned to look upon beans as the short term promissory notes of the vegetable garden, yielding the greatest interest on the investment. And just as in banking matters the element of sympathy is taboo, so don't waste sympathy on bean rows that have paid dividends on time.

Housewives should go on a strike when it comes to string beans. With a score of perfectly stringless varieties yielding fleshy, brittle pods, why should the housewife devote tedious hours to removing the heavy fibre connecting the back and front junction of the old bush beans? In our garden four varieties rule supreme, holding the performance record in their respective classes among approximately twenty stringless kinds available. Our tastes are equally divided among wax-podded and green-podded sorts, the former making more appetizing dishes when the beans are served as a salad. Sure Crop Wax will yield on an average of fifteen quarts of pods per fifteen-foot row, within two weeks after the rows come into bearing, which is within sixty days from the time seeds were sown. These are authentic figures, based on close observation of that variety for a period of ten years.

Brittle Wax might be called the round-podded companion to Sure Crop Wax, and it has the additional advantage of having white seeds. Those young pods that grow too old to be used in the fleshy stage will yield shell beans of a high character. Brittle Wax, however, in common with most round-podded sorts, does not equal the pod production record of Sure Crop Wax. If a fifteen-foot row yields on an average of ten quarts within two weeks after the row comes into bearing, be satisfied with the results.

The green-podded class offers the sequel to Brittle Wax and Sure Crop Wax in Bountiful and Giant Stringless. Bountiful holds, perhaps, the record for yielding handsome flat green beans in enormous quantities on the greatest variety of soils. On light soils especially it is wonderful. A fifteen-foot row has yielded one bushel of pods for me during the thirty days following the beginning of the season of bearing. Bountiful is ready for use within sixty days, and Giant Stringless follows within a week after it. Giant Stringless is a better yielder on heavy and cool soils than Bountiful, which shows a decided preference

for light warm soils. As a result the bearing season of Giant Stringless is longer than that of Bountiful, but even in its case I advocate the elimination of sentiment and suggest that the rows be pulled up after they have borne a maximum of three weeks, because of the law of diminishing returns. It is better to devote the almost exhausted bean row to another succession crop than to waste sentiment on a few late pods.

It would be unfair indeed to a great vegetable were I not to mention the superlative in lima bean quality as brought to us by Fordhook Bush Lima. On bushes not exceeding eighteen inches high and an equal spread of the bush in diameter, I have picked as high as three quarts of pods per plant between August 1st and the last of September. This record may be beaten on rich, deep soil, but on the rather shallow central Long Island plains it is marvelous indeed! Lima beans being a long-season proposition, they can not be handled in the same manner as other bush beans.

Sweet corn is the last of the great trio that helps to make the home garden a mine of good delicacies unobtainable at the market. There are two ways in which to handle this crop for a perfect succession, but only one fits the particular conditions of a small garden. For several years now I have made one planting of four fifteen-foot rows, each, of the following five varieties: Extra Early Cory, Golden Bantam, Early Aristocrat, Golden Cream, and Golden Evergreen.

Such a planting has generally provided the family with two dozen ears three times a week from the end of July until the middle of September. But there will be some gaps in the supply because of the great variation in time of maturity between Early Aristocrat and Golden Cream. Such gaps have been breached by making additional sowings of fifteen-foot rows of Golden Bantam whenever a few rows of beans become exhausted during the month of August. The last planting of that kind has sometimes been killed by frost, but even so the attempts were found worth while.

The observing reader will note that of the five varieties suggested, three are yellow. This is but a tribute to the ancestor of them all, Golden Bantam, which after twenty years holds the enviable place of first in flavor, a quality carried in a measure by the other two yellows of our choice.

The law of compensation decrees that you can not buy quality and size in one and the same lettuce head. Nor should we expect a cool season crop to thrive patiently under tropical midsummer skies. The subject of our salad



Left to right, Golden Evergreen, Early Aristocrat, and Early White Cory, a splendid trio of sweet corn

supply was successfully solved with the help of several types of lettuce, but before mentioning the varieties grown I would ask your attention to two absolutely essential and fundamental requirements of this crop—a soil full of humus, and transplanting of the individual plant.

Whether the transplanting occurs between the frame and open ground, or takes the form of thinning out in the garden, is immaterial. The thing to bear in mind is that lettuce plants need more than breathing space—they need elbow room. For a supply of really tender lettuce I sow short rows of Black Seeded Simpson, Wayahead, and All-Heart in the frame about the middle of March. These plants are generally ready for transplanting into the open ground around April 25th. They will develop rather slowly at first, but furnish delicious loose leaf as well as early butterhead lettuces from the middle of June until the first part of July.

As soon as the soil can be put in good gardening condition, generally around the middle of April, I sow seeds of Wayahead, Tender Heart, All-Seasons, and New York or Wonderful. Two weeks later the plants are ready for thinning out and the plants pulled up are then transplanted into other rows. This later sowing provides a succession of early butterheads up to the end of July, while Wonderful Crisphead will prolong the season until almost the middle of August when nought but Cos lettuce will stand the heat. Kingsholm Cos is sown about May 1st, to help along, together with endive, to provide salad greens during the month of August.

I generally sow two fifteen-foot rows of the varieties mentioned, which, together with an equal number of rows from transplanting plants, manage to keep the family well supplied with good lettuce throughout the season.

We grow liberal quantities of peas because they are the one vegetable which the market does not supply in satisfactory quality. The reason for this is twofold: peas in dried out pods have changed their sugar into starch, and the best flavored peas are "shy" yielders, hence unprofitable for the market garden.

Of course no one has a right to expect really sweet peas from extra early kinds bearing in fifty days. But even so, it is surprising how delicious tastes the first mess of Market Surprise, the "dimpled" pea that in our garden has completely superseded such old standards as Alaska, Best Extra Early, Prolific Early Market, etc.

Market Surprise must be classed as a semi-tall pea, since on good soil it will grow three to three and a half feet tall, about the same as Gradus,

Thomas Laxton, and Potlach. Incidentally, the trio is of unsurpassed quality for the home garden, although of late we have not grown Gradus. Thomas Laxton being of as good quality as a heavier yielder. Little Marvel, with pods eighteen to twenty-four inches high, has come to take the place of Gradus, because it furnishes more pods per vine and more peas per pod than that old favorite. When it comes to quality, Little Marvel is in a class of its own. For an adequate supply for our family of seven, we sow fifteen-foot rows of each of the above four varieties together with four fifteen-foot rows of Market Surprise. This supplies during normal seasons about two quarts of shelled peas twice between the middle of June and the end of September. On several occasions I have made successive sowings for a succession of crops, but hot, dry weather generally has made such sowing unprofitable.

Besides furnishing the family an ample supply of strictly fresh peas during the season, there is available at the beginning of the winter a dozen quart jars for later use.

For years Golden Self Blanching and Pascal celery have held the place of affectation in the hearts of those fond of good stalks, and our family proved no exception. It was only the greatest urging that I finally tried two newcomers, Golden Plume and Fordhook Emperor. I am delighted now that I took this step, for popular as the two old standards mentioned are to-day, I predict that in due time they will be superseded by these two newcomers. Celery is not difficult to grow anywhere, provided the soil is reasonably rich and the celery gets an abundance of moisture. The two fifty-foot rows which we grew this past summer were greatly benefited, however, by two applications of chicken manure, mixed with humus, the manure being spread on both sides of the row during August and September respectively. Tripling stalks averaging a pound and a half for Fordhook Plume and two pounds and a half for Fordhook Emperor proved the result of this extra fertilization.

INCIDENTALLY, and before discussing the root crops we grew to insure ourselves against winter needs and to put variety into the fare, let me tell you about a relative newcomer to our gardens and how we finally discovered how to prepare it. Chinese cabbage has not been an important factor in American home gardens for the last ten years. For five out of these years we experimented with it—and then gave it to the chickens. A few years ago we discovered



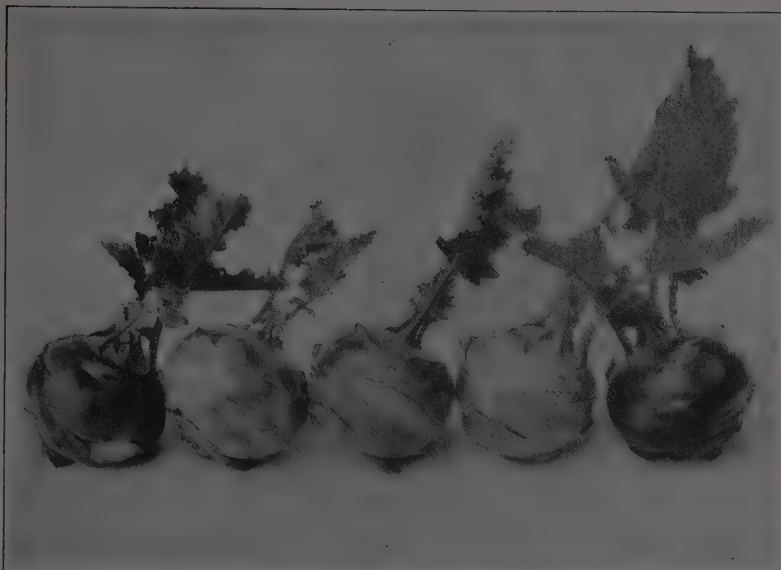
Market Surprise never fails to deliver quantities of real peas within sixty days



Growing tomatoes by the staking method eliminates from 25 to 30 per cent. of waste

best time to sow this was about August 1st, best heads were formed season turned decidedly when it came to cooking attractive heads, it problem to produce a niently well flavored to latable. Finally, hav- tra appetizing looking he variety Wong Bok, arose to eat this as a n a French dressing. iment was a complete nd firmly established babbage as a most pal- ad green.

ile speaking of paata- let me here add a plea rther chicory. This is a n vegetable and we grow a twenty-five foot rnish us our salad for Day. Here's how to it:



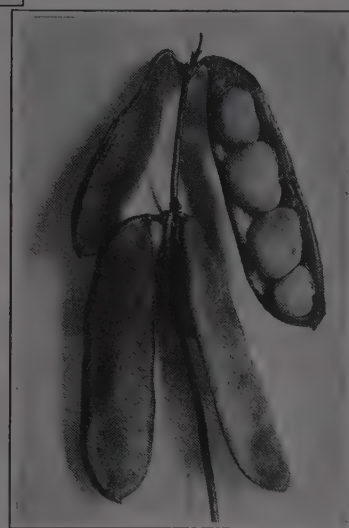
Kohlrabi cooked is much better than turnips, and raw is an excellent salad vegetable



Bountiful and Giant Stringless, the beans that never fail



Golden Cream, the luscious mid-season bringer of sweetness in corn



Fordhook Bush Limas, the best kind for the home garden

re sown along with the earliest sowings hardy vegetables like beets, lettuce, c. The young plants are thinned out to r to six inches apart in the row, and rther attention is paid to the row what- pting that it is weeded and cultivated n the rest of the garden. About the vember, the roots are dug, the green ut off within an inch or two of the neck nt, and the roots are reduced to uniform eight inches. They are then packed ide in layers in a box, layers of soil g. The box is then taken into the nch boards nailed to the four sides nd or soil is placed on top of the crowns. lly a can of water is poured into this generally around Christmas the most golden yellow salad with pink edges ut. The flavor is most appetizing. re several reas. is why our garden holds rows of root crops such as beets, hlrabi, etc. Besides furnishing really dishes (think of buttered beets!) these bring us the most desirable vitamins, e serving as roughage. We all ought e of these (comparatively speak- e foods.

course of the season the garden. n average of two dozen beets eek, and the end eason finds two or els stored either in pits in the garden. es used are Detroit, Early Model, and Globe. The last a fairly good winter

he trouble with n late and grown

as a fall product for winter usage is that the roots will hold an unusual amount of woody fibre. You have to cook average sized beets from three to four hours to get them tender. We had just decided that this was too costly (in fuel) when to my delight, now two years ago, I "discovered" a beet that may grow to the dimensions of a small mangel wurzel and yet remain so delicate and tender that two hours' cooking will put it in the finest table condition.



Winter loses its terrors before a battery charged with this type of ammunition

By all means grow some carrots. They are an easily grown vegetable, have quite ornamental foliage, and yield a crop of valuable food in due time. Varieties that we grow every year are Amsterdam Forcing, a very early, handsome sort; the first bunches of this are generally ready within fifty days. Ten days later we begin to use Chantenay, which is of more tapering shape but thicker at the neck. For the winter supply we depend almost entirely on Danvers Half Long.

I must not fail to record that cabbage is a vegetable ideally suitable for winter storage. The best keeper among cabbages is unquestionably the variety called Danish Ballhead. Premium Flat Dutch, of which Burpee's Surehead is the most popular, always behaves well for us. The first

demand of the season for cabbage, last spring, was supplied through that most excellent variety called Copenhagen Market. This past season we grew heads weighing seven pounds within ninety-five days from seed-sowing date. This is three pounds less than claimed by most catalogues, but even so you will agree with me that it is quite a respectable record. If your soil is heavier and more of a clayey nature, grow Enkhuizen Glory. This looks very much like Copenhagen Market, grows as large, but is more of a yellowish green, whereas Copenhagen Market is bluish green.

Kohlrabi is a turnip-rooted member of the cabbage tribe forming bulbs two to three inches in diameter when ready for use. With us it has completely replaced turnips, because it is not only more palatable but is good throughout the season. Its rather thick skin successfully keeps out mid-summer heat so that you may enjoy creamed turnips (*alias* kohlrabi) when the ordinary turnips grow bitter and pithy. For fall and winter use, we sow it during August in any rows exhausted of other crops of vegetables. Just watch that it does not follow another member of the cabbage tribe. Store kohlrabi as you do beets, carrots, or any other root crops.

Of course, the garden yielded other vegetables besides those dealt with above. Among the decidedly worth-while crops must be counted Mezieres leeks, Cocozelle Bush squash, Giant Prague celeriac, Lucullus Swiss chard, and Giant Gibraltar. But these crops were really only incidental to the main object. Every garden should hold as great a variety of vegetables as can possibly be produced.

*CALIFORNIA
BOASTS
this DAINTY*

*The Residence of
Messrs. A. and E.
BERNHEIMER*



*JAPANESE
HOUSE
and GARDE*

*At
Hollywood, Cal.*

*FRANKLIN K. SMALL
Architect*



The house stands on a steeply terraced hill overlooking Hollywood and Los Angeles, with mountains piled behind it and the Pacific Ocean for its western skyline. This view is of the rear, taken before practically any planting was done. Above is shown the front entrance



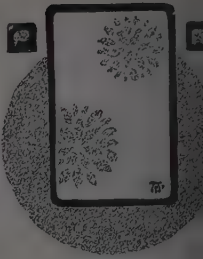
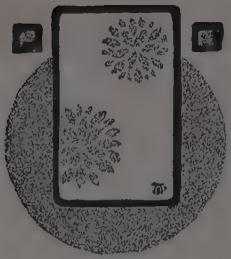
Built in the form of a hollow square with open court in the centre, a maximum of light and air is assured to all of the fourteen large rooms. The walls are of redwood and cedar, and both the outside ones and those facing the court are adorned with hand-carved scrolls, lacquer work, and gold leaf, while the roof is tipped with dragons and lanterns in bronze and gold. The Korean fountain is more than 500 years old



A summerhouse on one of the terraces, with its neighboring waterfall and cascade masked in flowering vines



Pagodas, summerhouses, and one glass-enclosed shrine were brought from Japan in their entirety, and there are lakes, waterfalls, bridges, and woody places where monkeys and birds mingle with countless pieces of Japanese humor done in iron and bronze and pottery



One of the pagodas transported bodily from Japan. It required six years to bring the place to completion, and as a result meticulous care in workmanship and arrangement is apparent in every smallest detail



One hillside view of the fifteen-acre garden. The place taken as a whole is so consistently of Japan that any one who would study Japanese gardening at first hand need never cross the Pacific

*A GARDEN OF
SUNSHINE and SHADOW
AT PASADENA, CAL.*



*ON THE ESTATE
OF
J. L. SEVERANCE, Esq.*



*PAUL G. THIENE
Landscape Architect*



At the foot of the lower garden (for that potent factor in garden charm—different levels—is present here) a lake and waterfall fed by a small stream mirror the luxuriant growth that crowds the water's margin, and add the voice of running water to the garden's orchestra of bird song and hum of bees



One of the many sun-flecked walks that wander informally through the woodland



Mountain views are one of the assets of Pasadena gardens, and the *raison d'être* for this lookout at one end of the upper garden



Broad panels of greensward with gay borders of flowers in the upper garden give it an air of spaciousness.



The atmosphere of an old English garden seems to have been caught and held in this vista in the upper garden



A wall fountain marks the side boundary of the grounds and successfully screens out adjoining property



A delightful view in the upper garden—the reverse to that shown above at the left

SPRING PLANTING

By LOUISE



Japanese anemones blossom in late September, and they are among the loveliest of fall flowers

IT IS difficult when surrounded by the advancing beauties of spring to project the imagination forward to that season when, instead of daily adding to her adornments, the garden is laying them aside, one by one, in preparation for the long siesta. But so sure as spring delights us, too soon will come autumn, season of reluctant farewells. Why do we not now recall how wistfully we clung to each flower as it bowed before the frost, until a scarlet wind-harried leaf or pendent berry became to us a cherished thing? Why do we not now remember, and take steps to keep the garden awake until the latest possible moment, employing more lavishly those plants that expand their blossoms exclusively during the autumn months and are proof against the early cold snaps, that the interim between the last flower and the first be not so sadly long?

Color and life are swept from many a garden by the first frost—often as early as the middle of September—and many blank months must ensue before the first crocus or snowdrop makes its appearance. In such gardens faith has been pinned too largely upon salvias and dahlias and tender annuals, braggart under summer suns, but reduced to unseemly pulp by the first hint of adversity. It is strange that this class of plants should be allotted so much space when their early undoing is a matter of certainty. Planting in their stead the autumn-flowering perennials and hardier annuals would mean a garden holding out attractions for many weeks after summer is gone, with bits of color hoisted to catch the soft light of Indian summer, and not impossibly offering a nosegay for the Thanksgiving table—an item to be very thankful for, indeed.

There are many good fall-flowering hardy plants and they are neither rare nor unknown, but in the spring, the usual planting season, frosts and farewells seem a long way off, and first place is yielded

to the importunate flowers of the spring and summer, leaving on odd corners and out-of-the-way places, if any at all, for those of the later season.

Michaelmas daisies frequently receive short treatment, yet given a little space these hardy natives and their offspring will brighten the garden with a tide of soft color for many weeks when there is little else to feed the eyes upon. Not all of them are worthy a place in the garden, however; some are weedy in habit and far too free in their increase to make them safe garden tenants. A choice of eight for September flowering might include Beauty of Colwe Climax, Feltham Blue, Top Sawyer, and Hon. Edith Gibbs, among the lavenders, and for the pinky-mauve tones, St. Egwin, Perry Pink, and Amos Perry. I know of no really good large-flowered white Michaelmas daisy, but varieties of the ericoides section, low in stature and with heath-like growth and masses of tiny white flowers, are very effective. Also where white is required in the autumn garden, the great daisy, *Pyrethrum uliginosum*, may be used, and phlox Jeanne d'Arc, latest of its family to flower, serves very well. Another white flower of merit is *Chrysanthemum nipponicum*, a Japanese moonpenny daisy that blooms in October, but on account of its bushy form and dark, shining foliage is of value throughout the season.

But white is not so much appreciated as the warmer colors when the days begin to have a hint of chill in them. Groups of triternate

planted in front of the Michaelmas daisies, their flaming "pokers" piercing the clouds of delicate bloom, are splendidly effective; add to the clumps of heleniums gold and russet and a most handsome autumn picture has been made.

No flowers of September are more useful than the heleniums. They bring fresh warmth and color to the garden and might well be used more extensively than they are. Fine among them is *Helenium autumnale rubrum* with rich russet-hued blossoms. Then there is a form with orange-colored flowers warmly streaked with red, and several whose flowers are a fine, pure yellow. Yellow is a precious color in the autumn garden and these golden heleniums may be used to supply in the place of the various members of the sunflower tribe which, for all the treasure of gold, are so persistent spreaders that they become an intolerable and ineradicable nuisance in any but wild or waste



Chrysanthemums, the most important flowers of the fall garden, should be broadly massed rather than planted in small clumps

places. *Helianthus Maximilianii* is the sole sunflower to which I would give place, and that because it opens its huge sprays of flowers in mid-October when bloom is scarce and our critical faculty less active. Moreover it is much more restrained in growth than many of its kin, so that a clump or two may be tolerated with safety. It is a very tall plant, sometimes attaining a height of seven feet, so that it calls for a place at the back of the wide border or among shrubs. With it might be grown *As. tartaricus*, a Chinese species, and latest of the Michaelmas daisies

for FALL BLOOMING

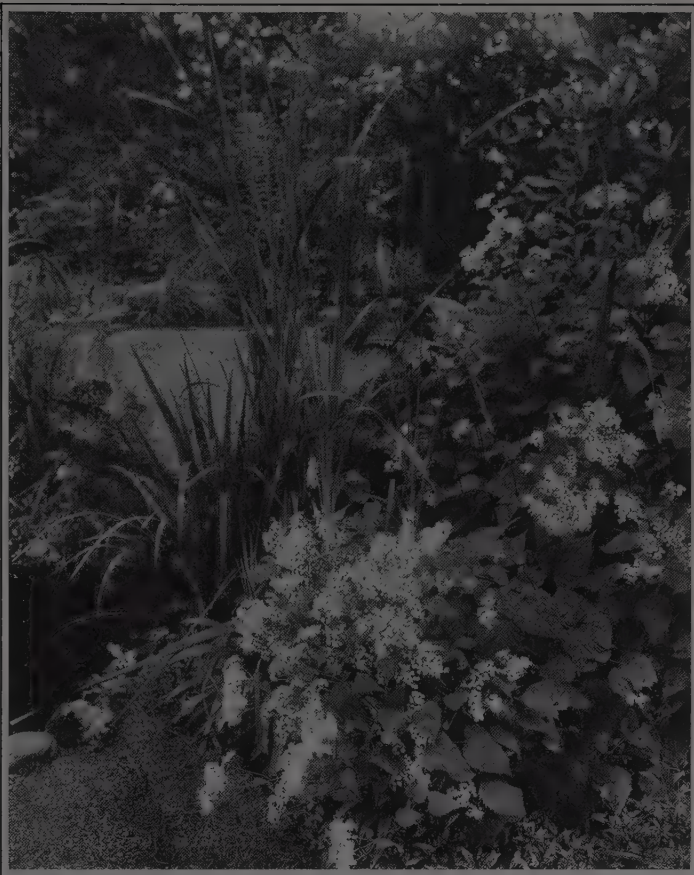
BEEBE WILDER

flower; indeed, it is one of the latest flowers of the garden, its great sprays of lavender blossoms often remaining in good condition through the first week of November. Both these plants are good for cutting, and one is not apt to ask at that shorn season if their blossoms are as fine or their colors as rare as those of an earlier day. Other Michelmas daisies that may be counted upon for October bloom are: Lovelty, a delightful plant of heathlike growth and dense masses of small mauve blossoms; *Aster grandiflorus*, a native with rich purple blooms; *A. turbinellus*, a prairie species; and *A. cordifolius* Ideal.

BLUE, the favorite flower color, becomes rare as summer packs away her belongings. The hardy annual salvia Bluebeard lingers past the frost-line, and there are the blue perennial salvias, *S. aurea uliginosum*, where it is hardy, and *S. Pitcheri*, that continue on for a few weeks; and there are doubtless spires of delphiniums again reaching toward a rival blue, but for the most part it is very scarce. Thus the autumn aconite, *Aconitum autumnale* (*A. chinensis*), opening its long spikes of rich blue hoods in October, is very welcome. This plant flowers at about the time that the Virginia creeper is finely tinted, and the two as neighbors make a warm patch of color for a brisk October day. The aconitum asks a rich soil and partial shade for its comfort, and in such a position will increase rapidly. It is well to remember that all parts of the plant are poisonous if eaten.

Another bit of blue may be looked for from *Ceratostigma plumaginoides*, the little plant that we used to know as *plumbago* *Larpentæ*. This pretty floriferous thing contributes the blue of gentians to grateful eyes for many weeks during the autumn, and finally goes out in a small conflagration of ruddy leaves. It requires the driest and sunniest places that the garden offers, and a light soil that is not over rich. Its place is in the rock garden or along the edges of sunny borders, and the pleasure it gives would warrant a much more extensive place than is usually accorded it.

Late September brings the flowering of Japanese anemones to those who have been so wise as to plant them. These are lovely beyond all the flowers of the autumn, frailly fashioned, delicately colored, but able to withstand the frost with surprising fortitude. These plants must have a deeply dug rich soil for their well-being, and an annual top dressing of some nourishing material—old manure or leaf soil—and it is necessary to give them a warm covering of leaves or litter of some sort in early winter after the ground becomes frozen. This is not so much to protect them from cold as to insure them against the inevitable freezing and thawing which is harmful to so many plants. Japanese anemones are hardy where the winters are consistently cold, but a mild season is often fatal to them. Given proper conditions in partial shade these lovely plants will thrive with no further attention, as frequent division is not necessary.



One of the best of the hardy early-fall blooming flowers is *Eupatorium ageratoides*—white snakeroot



The rich violet of *Aster novi belgii* (New York aster) makes a welcome spot of color in the fall garden

Of the numerous forms of Japanese anemone to be had, none gives a longer season of bloom or is more lovely than the old single-flowered Honore Joubert, glistening white with the golden stamens so splendidly in evidence, and the semi-double Queen Charlotte, tender lavender-pink. If the full quality of their beauty is to be felt these plants should be used in quantity. A single plant in a mixed border is a shy thing lost in a crowd. One needs to see a dozen of them, or better still, fifty, to realize the whole of their grace and charm.

PROBABLY the most exciting event of the autumn flower fête is the sudden—they are always sudden—appearance of the autumn crocuses. Apparently experience never accustoms us to a crocus outside the gate of winter—that is, outside the back gate—but what a delightful surprise they always are! An astonishing lot of money is spent yearly upon tulips and hyacinths, bright beings whose gaiety is but for a season or two, while few plant the autumn crocuses, though they are an investment of increasing value, spreading rapidly, and rising infallibly to their tryst with the frosts and the brooding skies. Moreover they are among the few small bulbs left us by the quarantine enactment and so to be doubly cherished and enjoyed. It is surprising

that so few bulb catalogues list them; indeed, it is the exception to find them mentioned, but any bulb importer can procure them upon order, and the orders should be sent in not later than July, as the bulbs should be in the ground as early as possible. Make a note to order the following varieties this July: *Crocus speciosus*, *C. zonatus*, *C. longiflorus*, *C. asturicus*, *C. sativus*, a hundred of each; this will do for a beginning. Plant them along the edges of the shrubbery where they will not be dug out by deep cultivating, or in the rock garden, setting the bulbs at least four inches deep.

A few weeks after the bulbs have been tucked away the sprightly bubbles will arise, rosy mauve, faint lavender, violet, white, unbelievably frail to face the frosty nights, but seemingly quite dauntless.

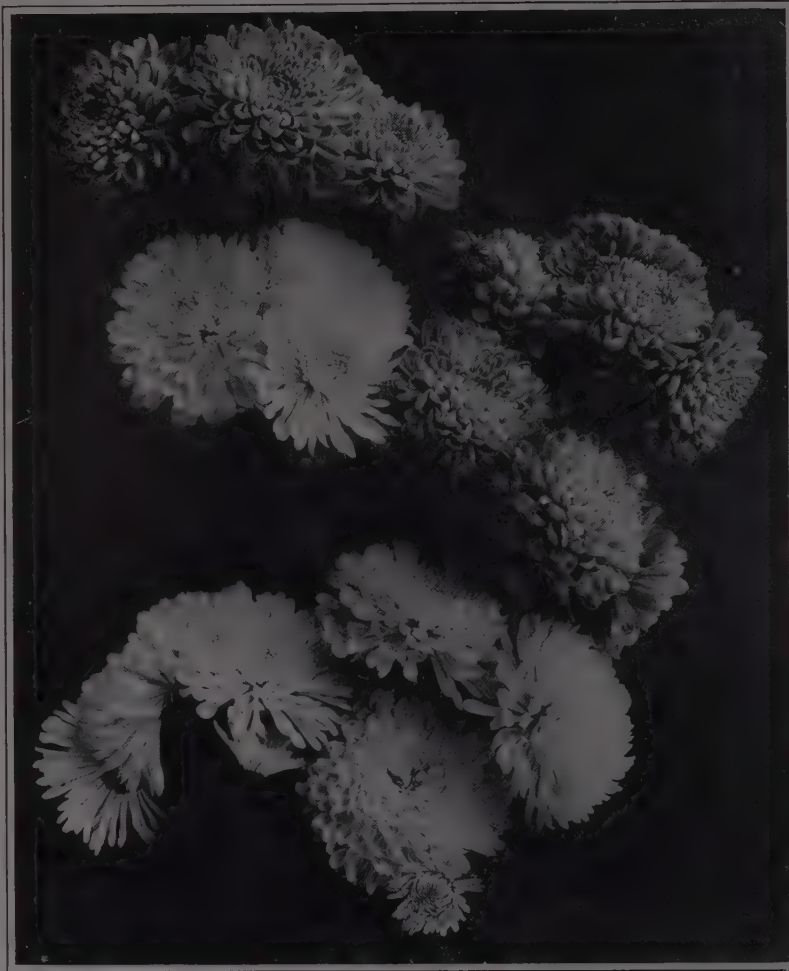
It has just come to me that a delightful picture might be created by planting autumn crocuses beneath a witch hazel tree. The crocuses and the pretty yellow fringes of the little tree would appear at the same time, making a picture quite springlike in its delicate, ephemeral quality. If autumn crocuses are planted in the rock garden, creeping thyme may grow above them, forming a green mat that protects the fragile flowers from spattering mud. Elsewhere periwinkle may serve the same purpose.

Of course chrysanthemums are the important flowers of the fall garden, but even these, universally beloved and admired as they are, are usually planted in niggardly patches, isolated clumps, and mixed borders, rather than broadly massed. How splendid to have so many chrysanthemums that one might walk about among their crowding, glowing bouquets, feasting the eyes upon their rich color, when all else in the landscape is brown and bare! A quite small garden could well afford a few feet planted solid with chrysanthemums, and no one should grudge the small trouble that they are when they pay so lavishly at a season when we are poor in beauty. Even after freezing weather their fires smolder and burn: gold and amber and bronze, rich tawny shades, russet and copper, old pink, and ruby red—all the hues of the autumnal season glowing anew in their ragged petals.

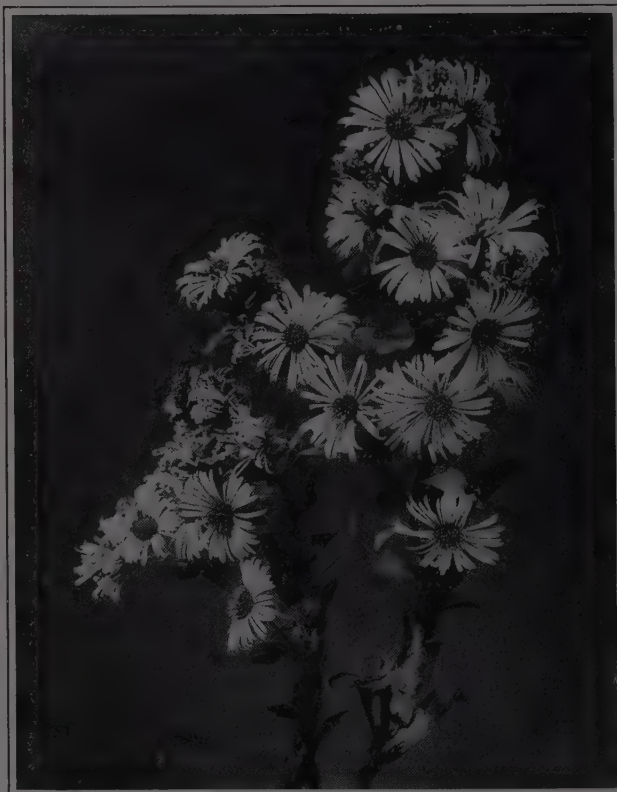
And chrysanthemums also are a paying investment. Fifty plants purchased now may be divided into hundreds next spring. Plant them in a snug place where the frosts will not be too hard on them, give them rich soil, but well drained, for winter damp is often fatal to them, nip them back once or twice during May to induce free branching, and autumn color and beauty in the garden are a matter of certainty. And what splendid varieties are now offered for the garden. Almost have they the variety of form and color of the indoor beauties, and many are of considerable size. Of course no one would forego the dear old-fashioned "buttons," particularly the little bronze ones, but assuredly must we make acquaintance with some of the fine new sorts also. Some bloom as early as August; others unfold their tight buds as late as November;

the ragged pompons are bewildering in their variety, and the single full of charm. A collection to begin with might include Anna Morra, Julia Lagravere, Connie Dick, Mrs. Albert Phillips, grandiflora, Pink Cap, Golden Climax, Rena, Lillian Dotty, Adelaide, India

Hill, Hortense Malgat, Yellow Advance, Mensa, Ida Katherine Skiff, and Charles Jolly.



A rich soil, well drained, is a pre-requisite if one would raise chrysanthemums like these



Aster novae-angliae (New England aster), one of the most showy of our native asters

AS I look over my autumn note book I find many entries concerning possibilities for color at that season. That azaleas turn a most lovely crimson, that snail dragons in sheltered places bloom until Thanksgiving, that China roses offer nosegays with lingering mignonne until freezing weather, that sweet marjoram is a good autumn-flowering plant blooming later than most, that Johnny Jump-ups and *Viola Papilio* bloom all winter whenever there is a mild spell, that the beauty of gray-leaved plants is particularly significant at this season. Lime grass, *Thalictrum glaucum*, lavender, *Stachys lanata*, and pinks, *Artémisia stellaria*, are worth planting only for the sake of the spreads of silver which remain in good condition for as long as we care to go and look at them.

Of shrubs there are few that offer flowers to the autumn, but many gain themselves in gorgeous leafage or deck their naked branches with gay berries. The swan blueberry, *Vaccinium corymbosum*, not only gives quaint flowers and delicious fruit earlier in the year but colors superbly in the fall. Its relative, *Enkianthus campanulatus* does the same, so far as color is concerned, and the little Japanese barberry boasts both scarlet leaves and scarlet berries. *Berberis Wilsonii*, less well known, hangs itself with splendid salmon-red berries, and many of the more recently introduced barberries should be added for autumn color. No one should miss *Evonymus alatus*, the cork-barked burning bush, literally a burning bush when its leaves are in color, nor its better known relative the common burning bush, *E. europaea*, whose berries make a brilliant show. With this last named shrub I like to plant the old snowberry with its waxen white berries; the two are delightful together. Other shrubs with attractive berries are *Ilex verticillata*, black alder; *Photinia villosa*, Chinese Christmas berry; various of the privets; many cotoneasters; *Rhodotypos kerrioides*, white kerria; *Celastrus scandens*, false bitter-sweet.

The HOME for a GREEDY PERSON

By SOPHIE KERR

BEAUTY and a healthy appetite—what have they in common? Much, according to Sophie Kerr, the famous novelist, and she tells why in this amusingly practical article

OF COURSE, greedy is not a pretty adjective, either in its sound or its implication. But it is short and it conveys with a little of over-emphasis the word I would have liked to use, but I found would have to be, as it were, compiled. Really, this should be headed "A Home for A Person Who-Likes-Good-Things-to-Eat," but that is long and cumbersome. Let's call it greedy and have done with it, and perhaps the enjoyment of such a home will take away the sting of the meaning.

One of us, I suppose, save a few confirmed gutter-snipes, but for some day to have a home in the country. If we do not aspire to a Tudor mansion surrounded with a palatial estate with hanging gardens and acres of greenhouses, orangeries, and model chicken runs, we do hope and yearn for a comfortable little house, white with blue shutters, perhaps, and all around it green things growing, to shade us, flowers to give grace, hedges for privacy, and, more practically, a substantial vegetable garden somewhere back behind the pergola, to provide sustenance for our tables, and make us independent of the green-grocer and the local huckster of uncertain price, but highly assured prices.

Being one of those people described in my first paragraph—I will use the word again, though I'll admit to its attributes—and also one of the many who hopes, some blissful day, to have a home in the country, I have often wondered why the vegetable garden should have to bear the burden of supplying the family table. Why not also the shade-trees, the hedges, the shrubbery? The trees I would not tamper with—the little heaven that azure larkspur and rosy snapdragon, spicy clove pink, and decorative hollyhocks make for us is far too precious to be dispensed with for anything else. But now, those hedges—they might yield tribute to the kitchen queen, with no loss of beauty. I shall plant them of a low, trimmed low and thick, with branches interlaced, and they give the loveliness of bloom in the spring, and later the fruit that in its raw state is so harsh and unpalatable that it presents no temptation to predatory small boys. But

endowed with the magic of fire and sugar, the same puckery, hard spheres become very delicious jelly, or quince preserves, or butter, quince honey, and quince curd, none of which may be ignored by the epicure. The happy possessor of a hedge of quince may well laugh at his neighbor's flourishing privet.

For other hedges, not along the street but therefore not accessible to the passer-by, blackberry, raspberry, and the new improved blueberry can be trained into the thrifty walls of greenness, each with a harvest many times worth the gathering. Currants, too—and gooseberries, if you like them in quantity. I do not. A few gooseberries go a long way with me. But red raspberries—ah, that is another story. Imagine going out to your hedge, gathering a huge handful of the fragrant red lusciousness and eating it, just so, whenever you like, instead of leaving them, crushed and wilted, in the splint basket of the market. Their

branches would take up no more space than any other hedge which bears no fruit, and they would serve the same hedge-like purposes. It would take a

little careful gardening to make such a hedge, but it would save a lot of space and be a real asset. To those whose grounds are limited such walls of fruited bushes ought to appeal enormously. Their thorns will make them good barriers against small animals and your neighbor's chickens.

If you want a higher hedge, a screen, perhaps, or a definite dividing line, filbert bushes will do it. At my old home in Maryland we had one, and an attractive thing it was. The trees were allowed to branch at the ground, and were trimmed, as they grew into compact, not too high, shapes, so close together that only a very small person could press a way between them without great difficulty. Early in the fall the brown nuts dropped out of their clustered fringed cups and were ready to add their fillip of flavor to the family menu. Salted filberts, or filberts crushed to use in ice cream and puddings and cakes are very, very good. You can have them without paying for them if you plant a filbert hedge.

PEOPLE who motor at all through the East must have noticed in recent years the outburst of small ornamental trees in the little town yards, trees with straight bare stems, and round, bushy green heads, like stage shrubbery more than any natural growing thing. I don't know what this tree is, but I'm quite sure it bears no edible crop. Did their proud owners but know it they could have little trees quite as decorative, and far more useful, by grafting Japanese persimmons on the native stock, or planting the hardy dwarf orange; the former in particular will achieve practically the same round shape, and in the fall, when the great golden persimmons hang on the tree like apples of Hesperides, it is wonderful to see. And oh, how good they are—and how expensive if one buys them at the fruit stores. I'm not so sure about the edible qualities of the hardy orange, but the tree is lovely, the leaves glossy dark green, and I have

an idea that the fruit might be used, like the quince, for preserves or for bitter-sweet marmalade. Before planting them, however, it would be best to consult a nurseryman. I offer my suggestions, not as a horticulturist, but as a—well—remember that first paragraph.

And when it comes to shade trees, there a whole world of good things to eat belongs to us. Why plant maples when black walnuts, butternuts, shellbarks, and Japanese walnuts will grow just about anywhere, and give us food as well as shade? In mild latitudes English walnuts, almonds, and pecans thrive and yield mightily. If one could feel secure from the dreaded chestnut blight, Japanese chestnuts bear nuts big enough to make magnificent marrons, and the trees are close and handsome. The Japanese walnut mentioned above is a good-looking tree, also, and its nuts are in flavor and richness very much like our native butternut, though my patriotic palate really prefers the latter.



White oxhearts. Not everyone appreciates the fact that a cherry tree is one of the most graceful and symmetrical trees we can plant for shade



Plum trees do not grow to great size, but they are a glory in spring when every branch is a solid mass of blossoms, and later on you reap a harvest of another sort in the delicious fruit



If your estate provides no space for a vineyard, let grapes displace the wisteria and other vines on arbor, or pergola, or porch. As to varieties, that is a matter to be decided by personal taste

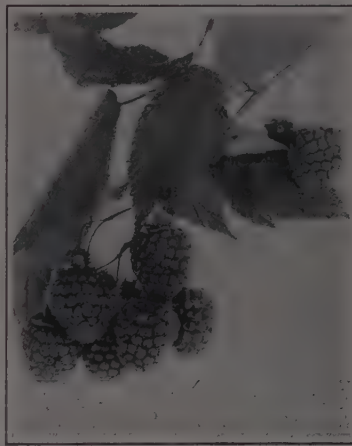


If you do not want to plant nut trees in your dooryard, desiring something that offers more of a necessity and less of a luxury, why, then plant an apple tree, or two, or three. A Gravenstein, both for eating from the hand and for concocting apple pies and apple sauce and cider, a Stayman's Winesap for a delicious winter apple, a Sweet Bough for a juicy, fragrant, sugary, sweet summer eating apple—these would be my choice, because each one of them has something of the enchantment of memory. And I would add, partly because of its dear, silly, romantic name, and partly because of its clear flushed color, a tree of Maryland Maiden's Blush. It makes the most wonderful apple jelly the color of Sicilian amber, with the flavor of nectar.

Besides the apple trees there are plenty of other fruit trees that will yield shade and decoration as well. Pear trees, for instance, and if you yearn for esthetic enjoyment also, you will get it full and plenty when your pear tree blooms, for its frail white flowers are enchanting to see and have a rich heady perfume that is like Far Eastern magic. You may further your esthetic enjoyment when the fruit is ripe—pear pie, baked pears, preserved pears, and so on as your fancy warrants. Pear cider, amusingly called perry, is more potent than apple cider. But this is a prohibition country . . . so there is no use talking about pear cider.

Plum trees, peach trees, and apricot trees, though they do not grow to great size, will give fine backyard shade, and add variety to your desserts. Did you ever eat ripe plums, peeled and halved and stoned, served with sugar and cream, just like peaches? If not, you have something yet to live for. And if your taste runs to the unusual, why not plant a mulberry tree? Ripe mulberries are food for Autolyces himself. We had two at home and when the fruit was ripe the birds would feast there, scolding vivaciously any child who wanted a share.

PERHAPS your little country domain has an arbor or a pergola which must be wreathed in vines for real effectiveness. Plant grapes, then, instead of wisteria, red grapes, white grapes, and black grapes. They need none of my recommendation, and I would not dare suggest varieties to other people, but on my own arbor I shall train one vine of an old-fashioned grape called the Croton, creamy white and without pulp. Just a bag of sweet juice, refreshing and delightful. And I shall



With care in pruning, raspberries, blackberries, etc., can be made to serve as hedges, in addition to fulfilling their usual purpose in life

This is not an idle scheme. It would be quite possible, even a very small lot, to plant for beauty and for use simultaneously to have our trees and shrubs offer us "the goodly fruits of earth" as well as decoration for our land and house. Odd clever things might be done; I once saw peach trees trained in espalier fashion on an arbor, making a thick roof of foliage and bearing fruit freely—certainly double purpose interestingly fulfilled. Of course it took skill and knowledge, as well as subsequent attention, to achieve this, but not an inordinant amount of them.



Currant bushes, also, can be trained into close hedges, and still furnish an abundance of fruit

OUR worst drawback is the set fashion of modern gardening—we are so accustomed to conventional flower beds and blackberry rows that we can think of no other arrangement. Whereas, like all growing things, they are perfectly delighted to give us the best in other surroundings, if we will give them the same care. They have their special beauty as great as many of the things we plant for beauty alone, if we will but look to see it. Imagination and appetite will point the way for a whole new era of landscape gardening if we have enough enterprise to encourage them.

And—oh yes—I nearly forgot to say it, and I hope Mr. Volstead does not read this: a hop vine will flourish charmingly over the back, or front porch, and if you desire the warm darkness and freshness of evergreens in winter, the many-berried juniper might play its part in usefully ornamenting the home of a greedy—not too greedy—person.





JUNE
in the GARDEN
of
PAUL D. CRAVATH
Esq.
at
LOCUST VALLEY,
LONG ISLAND

Photographs by
ROGER B. WHITMAN

the arbor-framed
 ce, there is a vista of
 and shrubbery, with
 glowing everywhere
 e house in the dis-
 tance



vo of the bordering
 opposite each other,
 avilions sheltered by
 and surrounded by
 masses of bloom



The pool in the centre of the garden



One side and one end of the garden are bordered by a path sheltered by arbors over which the Perkins roses are grown—showing their clouds of pink blossoms in June.

The arborescent end of the garden, where the rose-covered wall forms a background for a lawn bench and the quiet green

The PLACING of GARDEN SCULPTURE

By *RENA TUCKER KOHLMAN*

THE problem of finding the fitting thing in the way of sculptural adornment for a garden is a nice one to the landscape architect and the layman who venture to exercise their own judgment in the matter.

The first consideration before making selections is the style and period of setting. For instance, a country residence in the French chateau order calls for a formal classical treatment. An Italian tile-roofed and stucco house dictates the less formal but nevertheless conforming with the traditional.

The purpose of this article is to deal chiefly with the use of sculpture in the average country garden. In placing objects in a garden some rules of design which govern interior decoration may be relied upon; that is, the choice of sculpture which is suitable and in good relative proportion to the objects in the garden should be considered.

Proper spacing around and between objects should be allowed. The color of the sculpture is a point to be considered: if it be bronze, the color should be green or brown, light or dark. If the sculpture is marble, stone, or cement, the color must be suitable to the background of foliage provided as the setting.

The picturesqueness of the garden in the hands of a country house largely rests upon the constant supply of water. The very thought of running water in the pool, basin, and wall fountain in a garden gives a suggestion of life, movement, and sound which adds the proper atmosphere of romance and interest to a garden. The literature of the earliest poets makes reference to the enchantment of sparkling, rushing, talking fountains in gardens where flowers bloomed and sang ever so sweetly.

The Orientals have always had the esthetic as well as the practical reasons for arranging that streams should flow through their houses and gardens. In thinking of the palace of Alhambra at Granada one never fails to note the use of the system of tiny canals set in the floors of the rooms, which flow down their levels, in finding their way to the pools and fountain basins in the garden.

In an accompanying illustration is a suggestion of the modern adaptation of the Moorish idea of a system of waterways which is found to



A head of Pan by Marie Apel, used as the water outlet for a wall fountain on the Herbert Coppell estate at Pasadena, Cal. The tiny outlet from the basin is cut through the centre of the cobbled steps. In the fountain shown below, on the same estate, a Medusa head (by Marie Apel) is employed as the water outlet

be a most gracious complement to the California residence in the Spanish or Moorish style of architecture. It is the work of the gifted young English sculptor, Mme. Marie Apel, whose works in stone and marble have become better known in this country since she became a resident of New York City a few years ago.

The first illustration shows the retaining wall back of the sculptured head where the water flows through, descending to the basin below which is lined with tiles of Oriental design and coloring. Note the hand of the sculptor in the cartouche with the head of Pan piping his lay. The system of tiny canals in their turn drain the wall fountain and find their way, in the walk, through the flower garden below to another pool. Thus the murmuring waters cast their spell upon the beholder, recalling historic and romantic days in distant climes.

The Italian style of garden offers a variety of picturesque and artistic modes of treatment sculpturally: urns are placed on garden walls; bas-relief panels may be set in the stone or plaster garden wall; if a sculptured figure or group of figures is not desired for the pool, a delightful substitute is an antique marble urn filled to overflowing so that the brimming waters fall to the fish pool below—a delightful gratification of sight and sound.

Mythological subjects have always intrigued the fancy of sculptors as suitable themes for sculptural garden adornment. Nymphs, satyrs, bacchantes, and pagan gods are favorite sources of inspiration for the modern as well as the ancient sculptors.

Terminal figures (semi-conventionalized human and mythological figures) are often used instead of columns with their classical orders. Columns are employed to give emphasis or accent in the arrangement of a garden. Use of the terminal, which is less formal and often humorous in style, is a frequent resort with landscape architects.

Shown herewith is the use of caryatids as terminal figures to support a trellis which protrudes from the wall, giving privacy to the combination swimming pool and garden.

The bacchante has always been a theme for the sculptor's variations in bronze and marble. Edward





Illustrating the use of an old vase or urn for a fountain, in the garden of Mrs. Stephen Leonard at Easthampton, Long Island



An impressive use of marble against a background of massed evergreens and wild growth to harmonize with the subject—Diana the Huntress—on the estate of Gordon Abbott, Esq., Manchester, N. H.

McCartan's bronze bacchante and her offspring with cloven hoofs (here illustrated) is a delightful modern interpretation which graces the garden of a noted Long Island estate.

A figure such as a Diana with her hound, or a group such as the "Three Graces," are traditional subject matter for garden sculpture of the more stately type. Formal gardens are sure to include some such group as a climax to the sculptural adornment. In many cases, unfortunately, over-ornamentation in the profuse use of columns, stone baskets with fruit, sculptured cupids, garden urns, benches, etc., has created a sense of monotony. There are many chateau gardens in which the designer would seem to have ignored this danger. But when the proper balance and proportion of this type of decoration are maintained, nothing could be more charming in the formal garden with its paths and geometrical masses of flowers as a setting.

Old English gardens are delightful in their combination of the rustic and the formal. With the use of high yew and bay hedges in the formal garden the stately settings call for sun-dials, well-heads, garden benches, and gazebo bowers, and the sculptured hound on his marble base seems perfectly in place. Both in the formal and informal English garden the sun-dial has a

hallowed place, like an altar of the "Druids of Eld." The dial should never be placed on a column whose elevation is too high to allow the indication of the gnomon's shadow to be read easily.

Modern sun-dials, especially a number designed by our leading sculptors, are often works of art of great beauty. Paul Manship with his "Hercules" at Loretto, Pa., and Gleb Derujinsky, with his "Day and Night" at Lenox, Mass., have designed universal sun-dials with bronze hoops making latticed, hollow spheres, representing longitude and latitude, with the equatorial band, all properly pinned together with a "pole" to be placed in a direct line with the north star.

AN OLD carved stone well-head with iron crane for hauling up the water bucket is a sculptural adornment often used in Italian and English gardens. Antique well-heads are frequently brought to this country and our sculptors are constantly designing new ones.

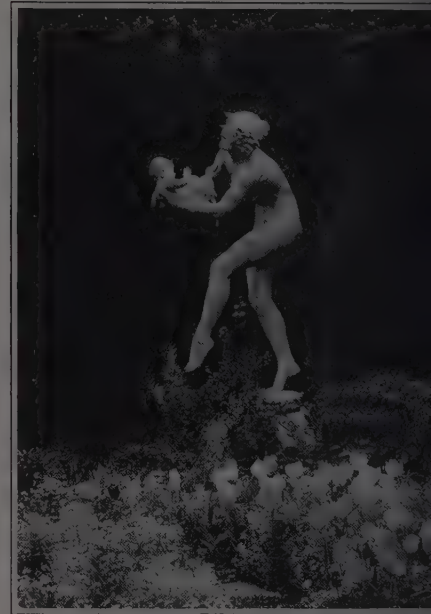
Stone garden benches and tables of the simpler type are difficult to find. The elaborately designed legs with acanthus leaves and claw feet are suitable only in the formal setting of handsome estates.

The garden gate and tool house offer an opportunity for the display of the owner's taste, give an indication of the style and mood in which the garden furnishings should be carried out.

A weather vane on the shelter house is a convincing final touch in a garden. Visitors to Gloucester, Mass., will remember an attractive weather vane—a silhouette pattern of an artist at work at his easel—which is placed on the top of a studio overlooking a garden.

Sculpture for the average American country place garden may not be conspicuous as an outstanding object of art, but it should be so monious in subject and size and in color and material, whether bronze, lead, terra cotta or stone, as to be perfectly at home in its surroundings. If there is no scene of inevitable fit, such settings should be created.

A "Piping Pan" will find a proper place near the wooded shady end of a garden plot. A pool that is planted at one end with tall grasses, rushes, water plants, and bushes, into which one's imagination might picture him as suddenly retreating after piping his plaintive lay. Particularly, a nymph or water sprite, if not arising from a pool of water, should be under sprays that freely about her.



A modern interpretation of a bacchante, by Edward McCartan, placed fittingly in a rustic spot, with a profusion of flowers lending their complement of color to the bronze figure. On the Harold I. Pratt estate, Glen Cove, L. I.



A Triton in the Italian rococo style, set in a pool well planted and surrounded with a background of evergreens, on the William H. Tucker estate at Manchester, Mass.



and Night" sun-dial by Gleb Derujinsky, in the garden of the Hon. Henry White at Lenox, Mass.

American sculptor in realizing the need of forming his works to the less classical formal type of sculpture, is creating new forms, the subjects not remote but the spirit of our times. Such lovely examples as Edward McCartan's "Girl Drinking from the Shell," Harriet Frishmuth's "Joy of The Sea," Edith Parsons's "Turtle Baby," and "Baby" illustrate the point. Janet T. S. "Frog Fountain," "Young Diana," and numerous such expressions from this gifted artist's hands are well known examples of modern garden sculpture.

For marble as a medium or material is more formal, more objective, and less sympathetic with the natural background than is lead or bronze. Lead casting for the final rendition of a sculptor's original model of clay. Bronze and lead are favorites for casting for outdoor use. Lead is more durable and becomes more beautiful with time and harmonizes the color of the sculpture with the surroundings.

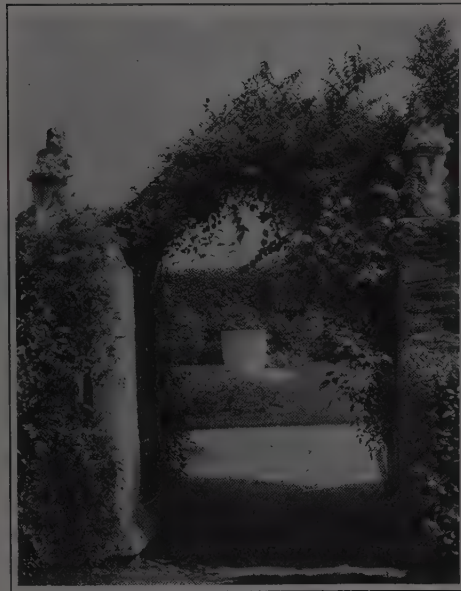
The revival of the use of lead for casting small garden urns, flower boxes, and bird baths is not so much for the reason that

it is a little less expensive than bronze, (for it is the labor and not the cost of the metal that counts most) but because warm gray lead tones in perfectly with paths of old stone flags and the stone paving around the garden pool copings.

Both bronze and lead are apt to look much better than stone or marble in connection with the country residence of plaster, timber, and brick. Pretentious and elegant residences of stone require such fountain figures as Gertrude Vanderbilt Whitney's three life-size male figures supporting a huge bowl, or Robert Aitkens's "Nymph and Satyr" group, both lately exhibited in New York.

In cases where it is not practical on account of the lack of space to have a pool out in the open, wall fountains are utilized. They may be treated in such a way as to give dignity and climax to the landscape architect's design.

Sculptural adornment of the wall may be accomplished by the very simple means of using a lead or bronze masque as a water source, such as those of Jane Poupelet's reproduced at the beginning of this article. An arched niche is usually sunk into the rough plaster wall as a setting, and the water basin below is utilized for gold fish.



Illustrating the use of a well head to lend interest and give a contrasting note in color as well as variation in texture. The humorous fruit-thieving sculptured monkeys on the gate posts are suitably placed near a riot of foliage into which, it might easily be imagined, they could disappear. On the E. B. Andrews estate, Newport, R. I.



A type of classical marble sculpture suitable for large grounds. On the country place of Mr. Otto Wittpen, Bernardsville, N. J.

Bird baths in a garden or upon a lawn are always desirable where running water is accessible, since they attract birds to the neighborhood. With the more pretentious and expensive baths the basins are usually a little more than table height in accordance with the Audubon Society's warnings in reference to the family cat.

Turning from the sublime—a bird bath which a friend devised in a moment of sudden inspiration consisted of the shallow top of a galvanized garbage can and an iron tripod which had been an umbrella stand. The two were harmonized with a coat of bronze green paint and the garden hose was made to turn the final trick in its conversion to a bird bath. Simple and attractive bird baths are often made of stone hollowed out to the proper shallow depth. Sculptured lead dishes on feet are exceedingly good.

Garden pots and urns, when rightly chosen, are gracious adornments for the garden wall, for the planting of bay trees to mark the placing of a flight of steps, and for plants which decorate the edges of pools. The Italians have delightful informality in the use of garden pots, placed in groups and singly.



An example of the use of caryatids as terminals to support the trellis in the garden swimming pool on the Greenwich, Conn., estate of Henry Britten, Esq.

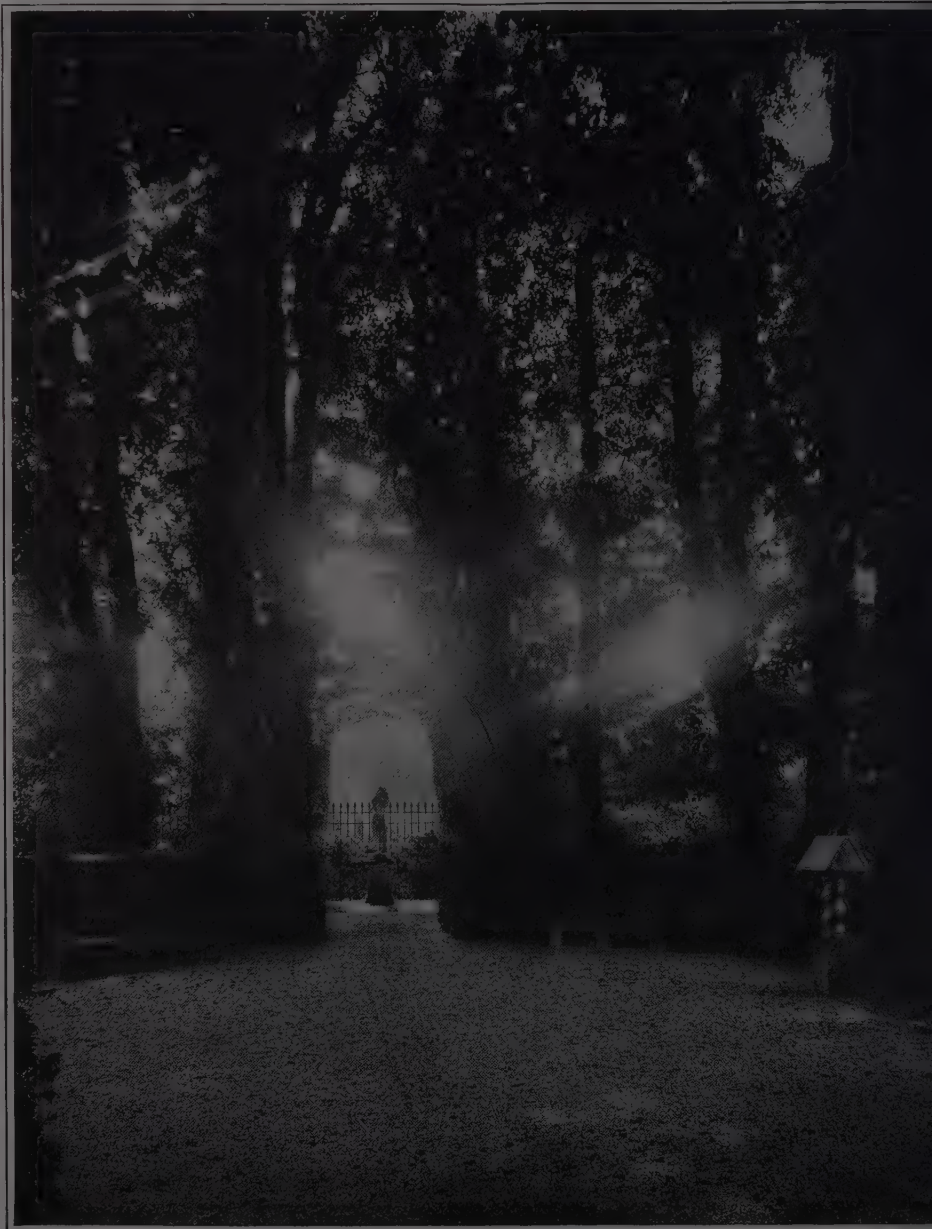


The *tapis vert* in front of the house is flanked by long box-bordered beds of blue aubretia which form a velvety blue carpet for the bright pink standard geraniums that are planted at intervals down the centre of the beds



The clipped yew walls of the outdoor dining room make an effective background for the consoles and urns of terra cotta colored marble

The temple is particularly lovely, with its marble lectern and the dissolving view of the little statue framed in the vista through the trees



The
INTIMATE
GARDEN of
MISS
ELSIE DE WOLF

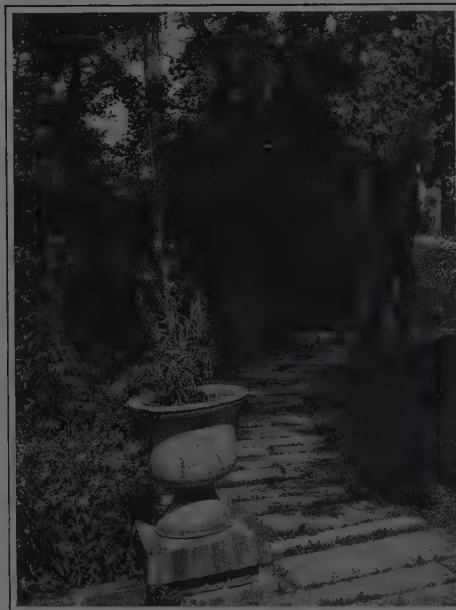
Photographs

at
 ILLA TRIANON
 at
 VERSAILLES
 FRANCE

ANDRICK V. DURYEA



Looking across a corner of the *tapis vert* to the ivy arches which line the walk of that name. Each arch frames a large standard Dorothy Perkins rose, whose pink blooms are doubly effective against the dark green of the ivy



Everywhere throughout the winding walks the broken flags are brightened by the little colored blossoms of rock plants growing in the openings between the stones

Where the flag walk widens to encircle a great tree, forming a secluded outdoor room walled with flowering shrubs and furnished with iron chairs and tables



Beauty as well as use has been served even in the little house for garden tools, and in the square water basin, overgrown with roses, at its right



The fountain and trellis covered with wisteria and Dorothy Perkins roses which face the house from the farther end of the *tapis vert*



The herbaceous border along the flag walks is a triumph of color massing worked out with phlox, snapdragon, calendula, buddleia, foliage plants, goldenrod, etc.



The square pool, fed by a single jet, is charming in its simplicity

ANNUALS for the GARDEN

By H. STUART ORTLOFF

NO GARDEN can be complete until it has its complement of annual flowers to eke out and carry on the progression of bloom and the mass of color throughout the entire season. It is an unfortunate circumstance that the air of permanence which hangs over the heads of all perennial flowers should endow them with the lion's share of attention and cause us to discriminate in their favor instead of giving due consideration to the delightful flowers which flourish for a single season. The life of an annual may be a short one, but it is a busy one, and for the amount of labor necessitated they return to us a hundred fold of joy and pleasure in their luxuriant masses and beautiful colorings. Their treatment with us has been far too casual, for we have for the most part considered them as makeshifts and given them places of minor importance in our garden schemes.

Annuals are particularly essential to American gardens, for our mode of living is such that in many instances our homes are transient, and we do not have the time nor the inclination to expend much money on permanent gardens. However, we do appreciate a garden, with its gay masses of bloom, so in order to secure it we must rely on those things which will give us a quick return. This is particularly true of the rented property, or the cottage we occupy in the summer, or for the new place which has been completed too late to enable us to do permanent gardening the first year. If annuals are planted in these instances, in a comparatively short time we have an effective garden, and our surroundings seem to be much more livable.

There has long been a division of opinion on the proper use of the annual flower. Some consider it too short lived to waste valuable time upon, while others have gone deeply into its uses and cultural necessities. This difference of opinion has been mostly English, but in this country where conditions are so vastly different we must have our own ideas on the subject. The instances which have been mentioned are the exceptional cases where annuals must be taken seriously in order to have effective gardens. The true use of the annual with us, in most cases, is to act as a filler or a cover plant in our permanent gardens where some early bloomer does its bit and passes on, leaving a bare space to be filled in with something else. Or they may be used as splashes of gay color in our borders while we are waiting for the belated glory of some perennial, such as the heleniums and the hardy chrysanthemums.

However, whichever way we use them, we must be conversant with their color, their time and period of bloom, their height, and the best cultural methods, in order that they may be thoroughly effective, either in themselves, or among other things of greater importance. The question of what to plant includes all of these items in order that our pictorial arrangement may be most effective and artistic.

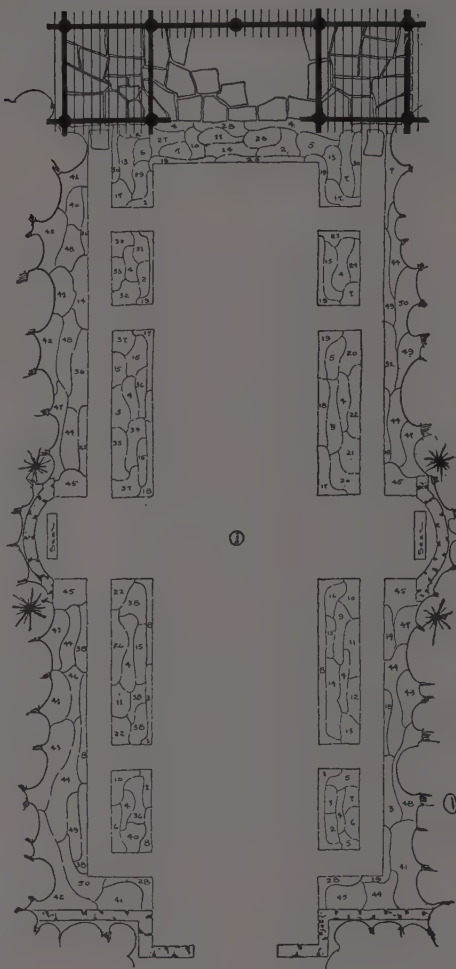
The question of color is not a difficult one, although there are those who would like us to believe it is. We can take infinite pains to work out color schemes, only to discover that Nature has a plan all her own. Seeds will not always come true to expectations, no matter how expensive they may be, and the color descriptions of even experts vary, for it is unfortunate that we have no standard color chart, and in its absence personal experience is the best guide. There

are, however, a few well known points to be mind in order that this problem may be made more easy to solve. White is the greatest maker in the garden, and pale yellow and color will also help to quell the warring tints. Plants with these predominating colors will and harmonize strong colors if they are used separating groups. Purple and lavender are very difficult to blend with other colors, especially blue and red, and are best by themselves separated by white from other things. Magenta is another such color. Graded shades of orange, and yellow are effective if the strong and deeper shades are placed at a point far from the eye. The more delicate and the paler shades are more intimate and are appreciated better if placed near the foreground, while deeper colors are best suited for the background or partially shaded areas.

The various masses of color should not be placed in regular spaces or blocks, but should "drifted" together in order that there may be greater harmony and softness in our garden scheme. Strong colors and contrasting colors such as blue and yellow, make interesting groups. Borders or beds of single colors are pleasing there are apt to be periods when bloom is scarce and unless one has a great deal of bloom it is fortunate to neglect many of the delightful things of various colors. The fact to be remembered, however, is that the predominating garden color is green, and try as you will you cannot prove upon it as a harmonizer or a foil for other colors.

THE time and duration of bloom is important for usually we plan our garden with a definite idea of when we would like masses of certain colors in certain places. We can make a garden time-table by grouping plants under such headings as early spring, late spring, early summer, midsummer, late summer, and fall bloom. Of course many varieties will overlap and some two blooming periods if they are not allowed to seed themselves. If an appearance of luxuriant bloom throughout the garden is desired for the entire season we must be sure that each section has one or more of the various varieties for each of the divisions of the above mentioned time-table. "Continuous bloom" is an erroneous phrase, for it is an impossibility; nothing blooms continuously that is worth while; there is always a long period of waiting and a period of time, during which no plant is at its best. The nearest approach to "riots of color" may be obtained by designating certain sections for certain periods and planting them only with things which reach perfection during that period. In this way interest may be concentrated on one spot while another is advancing to take place in the summer procession of gay color and beauty.

The question of height may be solved in the same manner as the question of time of bloom—prepare a table. Plants might be listed under such headings as low, medium high, high. A few things of course will be in the foreground, the medium high things in the middle, while the tall varieties will bring up the rear, and serve as a suitable background for the rest. The average catalogue will give you these approximate heights and serve as a guide. The question of whether plants are erect, while others are trailing;



Planting plan for a garden of mixed annuals and perennials. The figures in the plan indicate plants as follows:

- | | |
|--------------------------|------------------------|
| 1. Sweet Alyssum | 26. Larkspur |
| 2. Snapdragon | 27. Swan River Daisy |
| 3. Lupin | 28. French Marigolds |
| 4. Gladiolus | 29. California Poppies |
| 5. Stocks | 30. Nasturtiums |
| 6. Scabiosa | 31. Nigella |
| 7. Zinnias | 32. Salpiglossis |
| 8. Candytuft | 33. Amethyst |
| 9. Shirley Poppies | 34. Nemesis |
| 10. Cornflower | 35. Lavatera |
| 11. Calliopsis | 36. Phlox Drummondii |
| 12. Nicotiana | 37. Balsam |
| 13. Calendula | 38. Vinca |
| 14. Verbena | 39. Godetia |
| 15. Asters | 40. Sweet Sultans |
| 16. Petunia | 41. Dahlias |
| 17. Mignonette | 42. Cosmos |
| 18. Sweet William | 43. Helenium |
| 19. Lobelia | 44. Iris |
| 20. Clarkia | 45. Peonies |
| 21. Globe Amaranth | 46. Shasta Daisy |
| 22. Annual Chrysanthemum | 47. Hollyhocks |
| 23. Cypripedium | 48. Phlox |
| 24. Gaillardia | 49. Delphinium |
| 25. Ageratum | 50. Coreopsis |



heavy foliage while others have such a meaply of leaves that they need to be planted in front of or behind something of more luxuriance; each plant has a definite characteristic in this respect and it is well to be conversant with it in order that the plant may be placed effectively to its advantage.

The question of when to plant might be answered in a general way by saying that all annuals should be planted out of doors in the place where they are to fill as soon as the ground is warm enough to support their germination. We can tell this by the feeling of the soil, or by the length of life in the trees, shrubs, and other things. If, however, we do not wish to wait until midsummer for bloom, and annuals planted in such a manner will not bloom before, we have two methods of securing earlier flowers. The surer of these two methods is to plant the annuals in late March or early April in shallow boxes, flats they are called, or in pans provided with ample drainage. They should be placed in a position where they will receive a fair amount of light and air, and in an even, moderate temperature. The soil in these boxes should be rich loam, the bottom layer coarse and the top layer to the depth of an inch finely sifted. The seeds are sown lightly on top of this, and covered with a thin layer of sifted dirt pressed into place. The soil should be moistened before planting, and it is important to water each in a very gentle manner in order that the plants be not uncovered or washed out. When seedlings have developed enough to be pricked out, they should be "pricked out," that is, transplanted to other boxes and placed about an inch apart in order that they may have sufficient room to develop into healthy and husky plants. This process should be continued as

often as the plants require it, that is as often as they become too crowded, otherwise they will be thin and sickly, never amounting to much. When the ground out of doors is ready and warm enough, these seedlings can be transplanted to their permanent places. It is well to protect them from the sun and the sudden change into the open for a couple of days by placing newspapers above them, propped up on sticks so that they will not bend the small plants down.

The other method is the one which Nature follows in her plantings of annuals, and therefore has many upholders. This is fall planting. We say that Nature follows it because all of her annuals are self sowing. As soon as their seeds are ripened, they fall to the ground and almost immediately start about getting established in order that they may survive the winter months, and be ready to burst forth into early bloom in the spring. Now this is an excellent method for many of our annuals which will stand the rigors of our hard winter, but we must remember that a number of the things which delight us with their flowers have been brought from far off places, such as California and the Orient, where the winters are not long nor hard, so if we depend upon fall sown seeds in every instance we are doomed to disappointment. The indoor method may mean a great deal of labor and care, but it also means a more positive return for our efforts.

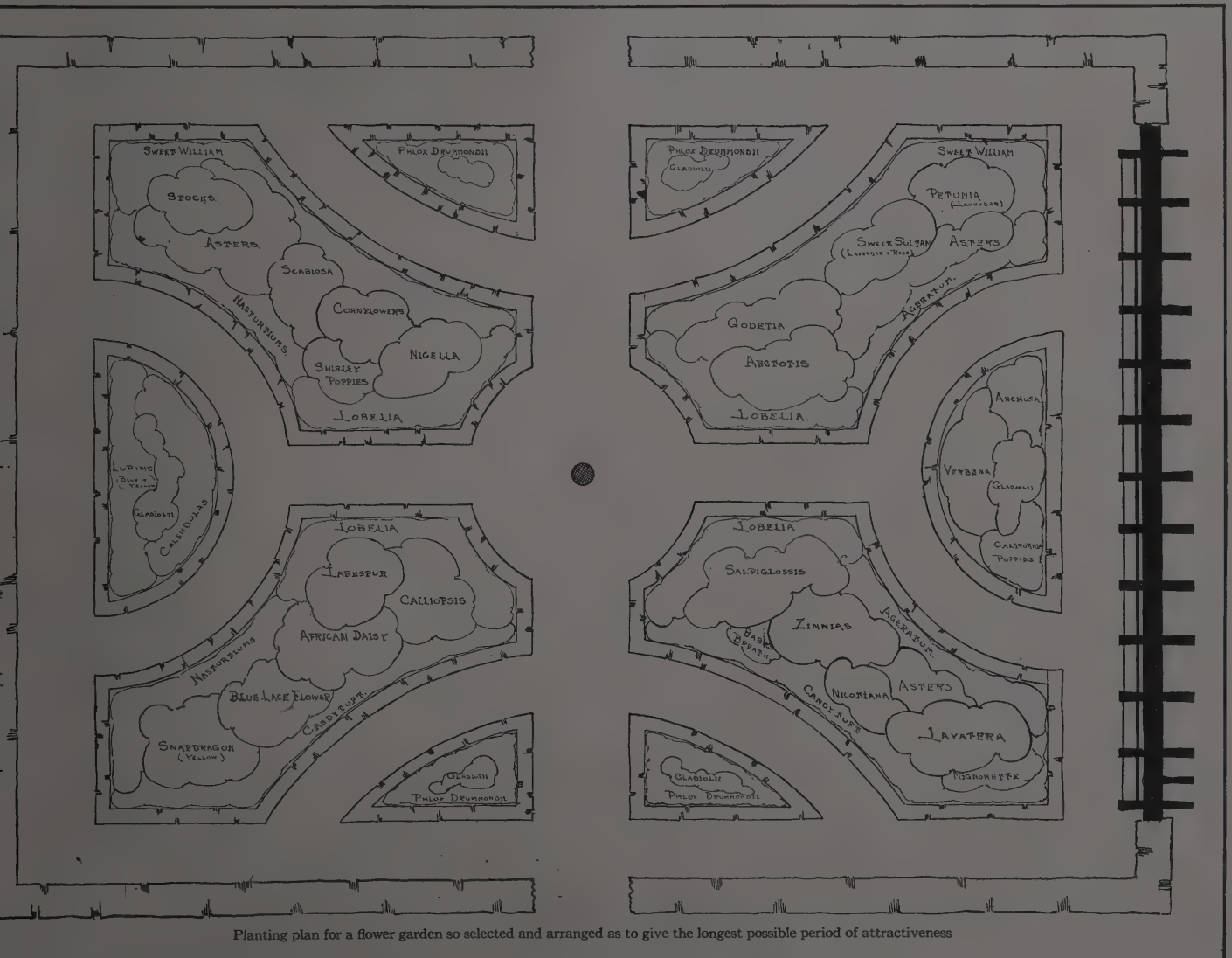
But whichever way we sow we must plant them in good rich soil. Unless of course we select our varieties to cope with existing conditions, such as poor sandy soil at the seashore, or shady places, or a hot, dry condition in the country. But for the garden proper the soil must be good and well worked to at least the depth of a foot. Then well raked, and if necessary fertilized with either stable manure or some

of the better grades of commercial fertilizers. This should all be well worked in, and the ground left to settle. This is an important item which is too often neglected, with the result that many of our seeds never materialize. Seeds sown in ground which is not firmed do not have a chance to take hold and push their way out. They are surrounded by air pockets, which allow them to dry out when they should be swelling with moisture. If one cannot wait for the ground to settle of its own accord, firm it by treading on it, or by watering it well.

The seeds should be sown in narrow drills. There is no definite rule as to the depth of these drills, but say from a quarter inch to an inch, except in the case of large seeds, or special instances such as sweet peas. All very fine seeds, such as poppies, should be merely strewn upon the surface of freshly raked soil, and pressed into it with a flat board or the back of a hoe.

Plant thinly. Many of the fine seeds may be made more easy to handle by mixing them with a handful of dry sand or soil. It is better to sow thinly in the beginning, for it is necessary to thin out the young plants in order that they may have sufficient room to develop in, so the thinner they are sown the fewer plants will have to be pulled up and sacrificed or be transplanted.

In watering seeded places, or young seedlings, care should be taken that too great a force is not used, for there is danger of washing the seeds out of the ground. If the soil is well moistened before planting, it probably will not be necessary to water again until the seeds have begun to work their way out. Gentle summer showers are beneficial, but if there is danger of heavy rain the seeded places or the young plants should be covered with a cloth or boards, so that the deluge will not harm them.



Planting plan for a flower garden so selected and arranged as to give the longest possible period of attractiveness

FOUNDATION PLANTING THAT ADDS

T. P. LAWLER

Photographs



Planting that when grown will insure year-'round attractiveness, being liberally evergreen. The Aarons residence, Great Neck, Long Island



A type of planting that will give some protection from the gaze of passers-by but yet not wholly screen the house from view. Home of Mr. S. M. Salke, Jamaica, N. Y.



Rock planting, with a small cedar for accent—a delightful suggestion for uniting the house with its site



An attractive foundation planting which throws the interest to the entrance portico

o' the BEAUTY and VALUE of the HOME

andscape Architect

H. GOTTSCHO



No other treatment will so effectively make a house a harmonious part of its surroundings as carefully considered foundation planting. Home of J. R. Nelson, Esq., Douglas Manor, N. Y.



Order planting for paths or steps should allow, as has been done here, for growth of the plants without overhanging the passageway. The Drucker residence, Kew Gardens, N. Y.



Foundation planting of all types should be liberally interspersed with berried shrubs, not only because they attract birds, but because of their own attractiveness in winter as well as in summer.



An entrance effectively "played up to" by the planting. Mr. Lawlor's own home at Flushing, N. Y.

A GARDEN of PICTURES

IN the Golden Age the gods left flowers in their wake. With the passing of Flora, the earth smiled and the fruit trees burst into bloom. There were no blights to strike the trees, nor storms to break them, nor any winter to put them to sleep. What a golden age it was for gardeners! And yet I wonder whether they loved the gardens as we do who struggle for them. For to us the joy of achievement is added to the miracle of growth.

The true gardener of modern days may belong to any one of three classes: (1) he may be a plant enthusiast, collecting plants chiefly for their horticultural interest, as a lover of antiques collects Sandwich glass; (2) he may be a flower gardener (if the term may be used as "market gardener" is used), growing flowers for their decorative value in the rooms of his house; (3) or he may be a garden lover in the most literal sense, reveling in his flowers not only for their own sake but also for their effect in the garden.

To the first class belongs the man who searches the nursery catalogues for new species. It is to him that we are indebted for the delicate beauty of the new irises and the bold color of the new mallows; but sometimes his enthusiasm for plant novelties carries him into strange paths, and he considers beautiful plants which are only rare. For in a gardener of this type the scientist overrides the artist.

The artistic side is more to the fore in the



By ROSE GREELY

Photographs by HAROLD HILL BLOSSOM

THE garden described in this article is that of Mrs. John Nicholas Brown, at her Newport, R. I., estate, Harbour Court. It was designed by Harold Hill Blossom, who was awarded the Gold Medal for Landscape Design at the Architectural League Exhibition last winter.—THE EDITORS.

gardener of the second class, who demands decorative beauty in his flowers. Pure line with bold color, delicate detail with pastel tints, a feathery vagueness of outline with elusive coloring like the softness of mist; these are the qualities by which he groups his plants. The appearance of the individual flower is carefully studied, but it is grown for effect, not in the garden, but in the rooms of the house. Like vegetable flowers are grown for use, and the ensemble of the flower garden is not considered.

This last is the first consideration of the gardener of the third class—the artist-gardener. He does not simply grow flowers—he makes a garden. To him there is more joy in three deep pink tulips under a blossoming apple tree, than in a long border of primroses, dahlias, for to him the garden is not a collection of flower beds, but a gallery of living pictures.

Perhaps he has primroses and dahlias but they do not dominate the garden. Either they are grown in a separate area, or the vegetables are grown, or they are planned for in their relation to the rest of the garden so that they blend harmoniously into the whole. Surely he has flowers for the house (for what is a house without flowers?), but they too are grown in a separate area, a cutting border where they may be culled at will or else they are picked in the garden, ruthlessly, but with consideration; taken where their loss will not be felt, and spared



A cloud of white lupine silhouetted sharply against the sombre green of the hedge



This picture, taken in the fall when most of the flowers had finished blooming, shows how cleverly form, mass, and texture have been handled to maintain interest when bloom and color fade



The garden has three gates of dark hand-hewn oak, differing in design but alike in feeling

where they are needed for garden color. For he thinks, not in terms of individual flowers, but on broader lines: color, form, texture, light and shadow, and above all, unity—these go to make his garden pictures.

It is largely to this pictorial effect that the old-time gardens owe their charm. Sometimes they have been consciously planned as compositions, to which time and growth have added luxuriance; sometimes the result is due wholly to time and accident, which have developed one plant at the expense of another. To reproduce this studied luxuriance in a new garden is difficult, but that it can be successfully done is shown in the accompanying photographs of the Newport garden of Mrs. John Nicholas Brown, which Harold Hill Blossom designed and which won him the gold medal for landscape architecture at the last Architectural League exhibit in New York.

A garden of variety to delight the heart of the plant enthusiast, a garden of flower detail to captivate the flower grower, it is most of all a garden of living pictures to charm the gardener who is also an artist. There is a beauty in these pictures which will appeal also to those who are neither gardeners nor artists. Although the garden is elaborate enough in size and plan to be in keeping with the house for which it was designed, it has retained a restful feeling of simplicity. Large, rectangular, and completely filled with perennials in stone-edged beds, it has no relief



Change of level between the two gardens, the use of trees and flowers, the gates, and the great enclosing hedge, all suggest an old English garden



Entrance to the rose garden from the upper lawn

of lawn or water, and yet cleverly escapes the danger of monotony in large flower-masses by the use of shrubs and small flowering trees in the flower beds. Placed at dominant points, dogwoods, crab apples, lilacs, and banks of azaleas break the expanse of smaller flowers and add picturesqueness and charm to the composition. From the centre of the perennial garden there are steps leading to a box-bordered rose garden on a higher level, and a rose-covered fence of rough-hewn oak, topping the retaining wall, makes a partial barrier between the two gardens. The architectural details of hewn oak and uncut stone are beautiful both in themselves and as a background for the flowers. Walls of stone seamed with lines of shadow, with the sharp contrast of sunlight on the treads of the steps; gray-green foliage of snow-in-summer, a steeple of foxglove, and a mass of lilac; the heavy texture of privet hedge on one side of the steps and the sturdy beauty of rose-covered fence on the other—these make a picture not to be forgotten.

The fact that the photograph of the steps was

taken in the fall when most of the flowers had finished blooming is worthy of note. Bloom and color in the flower garden are usually considered by garden planners, but the equally important factors of form, mass, and texture are often disregarded. Essential elements of the summer garden picture, they are the entire dependence of the "out-of-bloom" composition. Properly used they make possible such pictures as this—pictures that express the glory of the garden, for it is not only in the summer that the well-designed garden is glorious.

A cloud of white lupin against the dark green background of a hedge is breath-taking in effect, but is it more beautiful than a subtler composition of steps leading off between evergreens to the distant hills?

The foliage of Japanese andromeda, gleaming in the sunlight and sombre in the shadow, the light plumes of ground juniper, and the wind-blown leaves on the stone steps, are as interesting in detail as a flower picture.

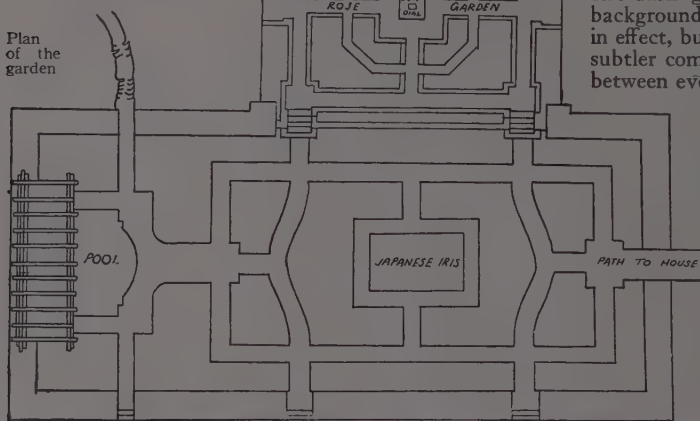
Stronger contrast is the dominant factor of the photograph shown of the pergola end of the garden. The delicate outline of bleeding-heart against the light path, and the



Showing the fence-topped retaining wall and the broad stone steps leading from the upper to the lower level

white centre of azalea flowers with their foliage before the posts of the pergola, carry the eye inevitably to the gate leading from the garden to the depths of woods beyond, where sentry trees beckon alluringly. Much of the charm, however, is in the gate itself.

The three pairs of garden gates, differing each other in design, are alike in feeling. Of hand-hewn oak, they express, not the most stereotyped work, but the spirit of the old gates of English gardens. The gates, the pergola, the fence-topped retaining wall, the change of level between the two gardens, the use of shrubs and trees with the flowers, and the great enclosure, all suggest an old English garden. It is difficult to realize that the garden is modern, and that the effect of age is, like the composition of the garden pictures, the work of an artist.



The pergola end of the garden, with the gate beyond, leading to the depths of the woods

A PERFECT INTIMATE GARDEN

is that of

*Miss ELIZABETH FARNUM
at Norfolk, Conn.*

*MARIAN COFFIN,
Landscape Architect*

*TAYLOR & LEVI
Architects for the House*

Photographs by HARRY HEALEY



from the house across the pool
eat under an old apple tree at
the end of the garden



showing layout of the grounds and
on of the house with reference
to the gardens



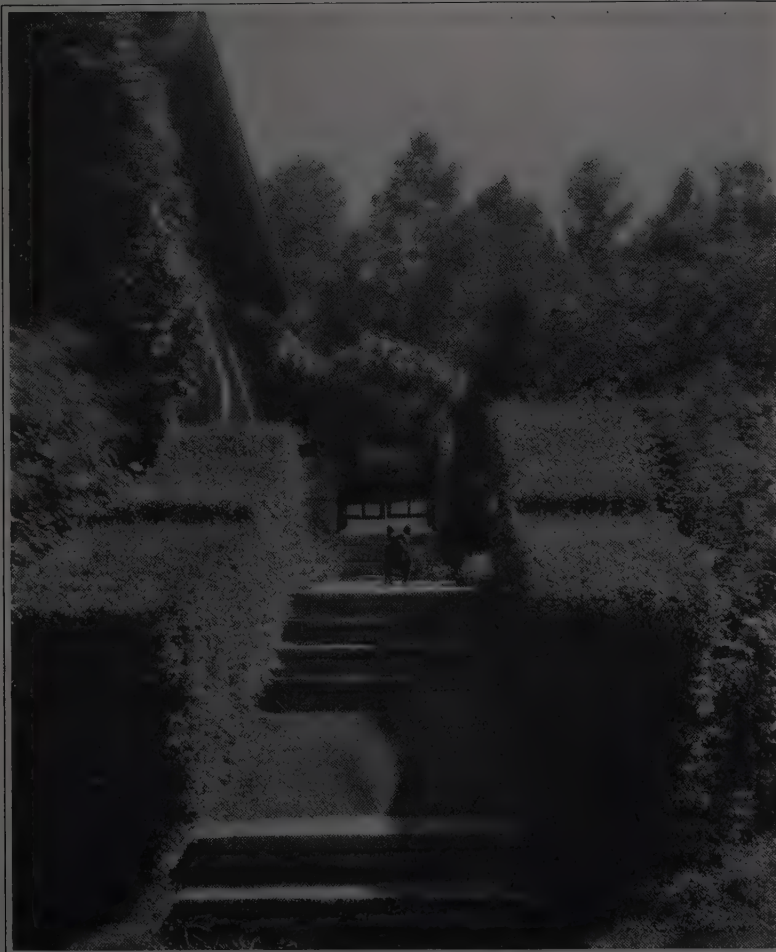
A glimpse of the garden that follows the outline of the outside circular path around the pool. It is planted in a color scheme of mauve, pink, and purple—pink and mauve phlox, pink and purple gladiolus, deep purple Japanese iris, pink snapdragon, and mauve heliotrope, with edging of pink and purple verbenas, backed by tall pink hollyhocks and mauve asters which carry these colors through the summer



The intimacy that makes a garden seem part of the house is the outstanding quality of Miss Farnum's garden. View from the circular path opposite to that shown above



Central walk from the apple tree,
leading toward the house. Pyramidal
trees provide effective accents in
the planting

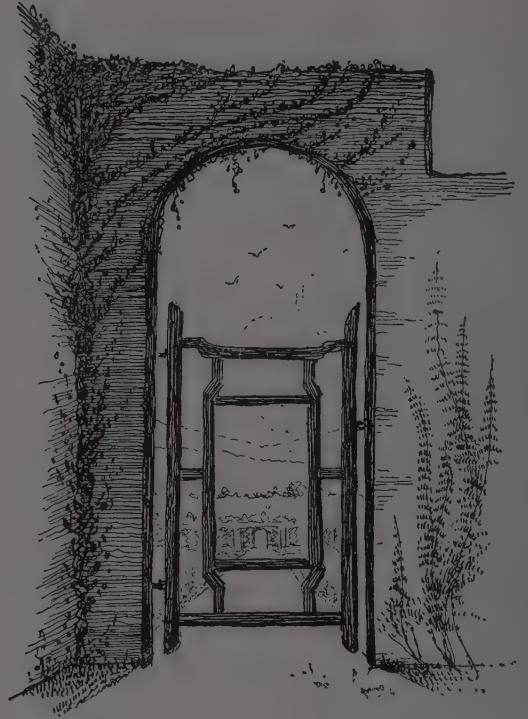


The cross walk leading from the drive,
through the small gates in the background
to the garden, and down stone steps to the
grass terrace below

The GARDEN GATE that CHARMS by ITS SIMPLICITY



A green lattice gate set in an arch in the concrete wall, its top curved to complete the circle of the arch which frames the garden picture for the passer-by



Small branches bound together with half rounds in rustic Japanese fashion. Such a gate costs little, and when the garden behind it is of the informal type, nothing could be more appropriate



The mysterious charm of the garden gate like this lies in the fact that it divides the known from the unknown, by its own grace of form giving a hint of the loveliness within



Mission architectural details such as shown here are peculiarly appropriate for the gate to a California garden. The bell is rung by a tap from a wooden hammer hanging beside it

N and INK SUGGESTIONS of GATES at SAN DIEGO, CAL.

By ELOISE ROORBACH



A white wall pierced with an arch in which is hung a wooden lattice door, and overrun with Cloth of Gold roses



This gate is in a north wall, but the garden within, which fairly blazes with color, is in full sun, and it sparkles and glows with intensified power when seen through the dark grill of the gate



A light green gate with delicate spindles set like the lower half of a Dutch door in an arch in a concrete wall, so that the upper half of the arch frames the garden

Wrought iron gates, whether set in concrete or stone walls, are always attractive. For gardens by the sea, where vines are difficult to grow, tall, slender cypress trees may stand guard on either side



Photograph by Ph. B. Wallace

Robert R. McGoodwin, architect

An engaging glimpse of a corner in the grounds of Samuel F. Houston, Esq., Chestnut Hill, Pa. The varied leaf patterns of the greenery are in delightful contrast with the rough gray tone of the wall and steps

BULBS that BLOOM INDOORS

By MARY HARROD NORTHEND

WHY not paint flower pictures on your window sills, not with pigments, but with bulbs, choosing those of soft or brilliant tint, whichever best harmonizes with the more prominent shades of your drapes, rugs, and wall coverings? Surely nothing more effectively breaks monotony of space than these blossoming bits, and they lend themselves to constant rearranging as their blooms fade. To-

a group of iridescent blues mingled with warm pinks, perhaps emphasizing the tones of the winged slip cover, delight our vision; to-morrow, and ivory, vying with the posies of the window-drapes, nod their colorful heads to gladden the eye; while next week perchance ruby-red individualized by deep maroon, almost black, repeat the exquisite tones of the Oriental rug, fill beauty-thrilled souls with satisfaction.

In the north room, let your bulbs bring a glint of gold to coax the elusive sunshine in. Lemon-yellow, pale cream, and a goodly dash of vivid red create an illusion well-nigh perfect. Used in conjunction with warm buff walls, gay chintz curtains, and painted floor bordered in jade, they bring to the room the charm of sunlight no matter what the weather.

Indoor gardening has certainly developed with rapidity in this country during the last decade, and numerous experiments in bulb raising have been successfully made. Many new types, rare and unusual in coloring, have as a consequence been developed, and we are now able to reap the beauty of these types not only in our spring outdoor garden but in our winter indoor garden as well. Bulb culture in America has passed the experimental stage, and large areas of land are increasingly being devoted to bulb culture along scientific lines. Particularly adapted to this industry is the climate along both the Atlantic and Pacific coasts, and gratifying results have also been obtained on private estates in northern New York, Michigan, and Virginia.

Statistics prove beyond doubt that while we draw on Holland for bulb supplies, realizing the perfection the industry has attained in that country, yet we are more and more supplementing our stocks from our own fields. Specially designed greenhouses have been built for the curing of bulbs, and they have been dug in the fall, and each year in these houses has been scientifically treated as to light and ventilation, different

A SINGLE hyacinth in winter spreads more joy, we'll wager, than a whole bed of pansies in summer. Just because outdoors it is bleak and cold is no reason why indoors shouldn't be cheerful. So plant plenty of bulbs—Miss Northend's article will tell you how to set about it—and have flowers about you all the long year through.—THE EDITORS.

methods of course being employed for different bulbs. It stands to reason that stock thus raised is reliable, and while it commands a higher price than stock obtainable from miscellaneous dealers, it gives proportionately greater satisfaction. Such bulbs in our indoor garden attain the vigor and growth of outdoor cultivation, and they are worth the bit extra they cost.

In choosing bulbs care should be taken to see that they are firm and weighty. Failure to secure these two points presages disaster. Not that a small bulb should be avoided, only that it should be weighty in proportion to its size. It is undeniably true that the smallest bulbs often give the best results, and you can be sure they will if you have a proper regard for these two important requisites in their selection. Isn't it a pleasure to know that inside the bulbs you have chosen is laid up a stock of strength and vigor that will send forth from the hearts of the brown coverings lovely flowers to bask in the sunlight, and disport their charm and fragrance for your pleasure?

NEVER store your bulbs awaiting a convenient time for potting them, as they evaporate moisture quickly, which destroys the expected bloom. Determine before purchasing the mode of culture you intend to follow, and when you get your bulbs plant them. Bulbs take kindly to various plantings, sending out thrifty shoots and colorful blooms with rhythmic precision, whether growing in pots, in water, in sponges, or in masses of specially prepared moss fiber. It is through experimenting with these various schemes that we are enabled to study the evolution of bulbs from the time of their rooting until they burst into bloom. They certainly afford a fascinating array of material to draw from.

Potting is the oldest and most popular method of bulb planting. Choose six-inch pots, crocks, or four-inch flats with holes bored in the bottom for right drainage. Dip each into boiling water and then into cold water to conserve the moisture so beneficial for right starting. Place over each hole a bit of broken china or a piece of broken pot,

not a flat bit that sits tight over the hole, but one that curves downward giving ample space for drainage and fresh air, and yet holding the soil back from dripping.

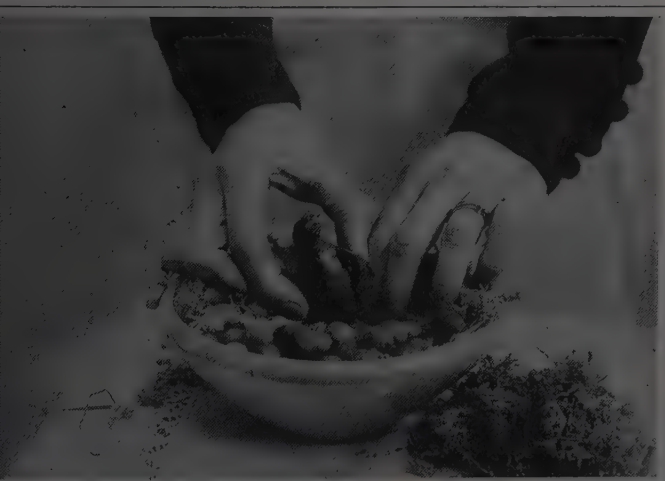
Enthusiastic bulb growers oftentimes fill pots one third up with broken bits for better drainage. This is a matter of personal preference. Over the drainage place a layer of sphagnum moss or coconut fibre on which pieces of charcoal are set to

sweeten the earth. Then spread the soil which has been previously prepared. This should be a compound of garden loam, leaf mold, decayed sod, or well rotted cow manure, with sand and bone meal, the latter in the proportion of one teaspoonful to a six-inch pot. While leaf mold can be purchased of the florist, the best results are obtained from that which has been gathered in the woods. Hunt through the forest growth until rich fibrous soil is found, soil that has been accumulating richness for many a year, and that will give new life to your bulbs. These ingredients should not only be thoroughly mixed but baked in a large iron pan to destroy any slug eggs that have nested away in unexplored places. I always screen my completed soil mixture to make sure that it is of fine and even grain.

Measure the depth desirable for the setting of each and every bulb, bearing in mind two essential points: first, that no soil can be piled higher than one inch from the top of the pot, and second, that hyacinths demand their tiny green noses hidden at least one-half inch below the surface; tulips one-quarter inch; narcissus and jonquils require their noses placed a bit above the surface.

There are many and important details to be observed if you wish perfection in your bulbs, but the effort expended is amply repaid. Personally I prefer pot planting to any other, perhaps because it is an old-fashioned idea that has stood the test of time. Wonderful success has been attained, however, by growing bulbs without soil, and this method of course permits one to follow their progress minutely.

After potting comes "plunging" as the experts term it, in reality the laying of a coverlet over the bulbs that they may the better conserve strength for rooting and leaf throwing. A layer of straw, leaves, sand, or mulch answers the purpose, and then bulbs should be left alone, for they are now perfectly content not to be fussed over.



Planting a narcissus bulb in moss, with varicolored marbles used for decoration. Sometimes witch balls—which are procurable in rainbow hues—are used in place of marbles.



Here a narcissus is being planted in earth, with moss around the sides, which method serves to retain the moisture better than when only moss is used.

For early winter bloom, set the pots in some sheltered spot outdoors. Then as the weather gets cold, bring them into the cellar and stand them like "maids in a row" in a spot where they will not be smothered with heat. If forcing is required, transfer the bulbs into a room with subdued lighting, gradually bringing them into the sunshine. In five or six weeks forced bulbs generally bloom, but it is much better to let them mull along even if they are six months about it, for then the blossoms are stronger and much more enduring. Forced bulbs are wholly lovely, but they lack the stamina of the slower-growing ones.

When your bulbs are far enough advanced to remove from the cellar, they are ready for dress parade. This is accomplished by taking them from their tiny pots, crocks, or flats, and transplanting them into painted flower pots or some of the many lovely containers that are to-day procurable in colors ranging from the soft-toned frosted glass to vivid tinted pottery. Then there are the more substantial containers of hammered brass, copper, and even iron with polychrome decoration. Plant a single bulb in each container, and for effect overlay the soil with fibrous moss in tones varying from yellow to brown, or add pebbles, witch balls, or marbles and agates to lessen the danger of encrustation of the earth, and also to secure colorful foils for your blooms.

As an aid to decoration give me bulbs and plenty of them. I have now in various stages of culture one hundred and forty-six bulbs, and they are steadily marching onward to colorful glory, some of them slowly, to be sure, but none the less certainly. Already I have placed on my window sill a row of blossoming bulbs, with a zinc strip turned up at the edges underneath to hold the water without allowing the soil to stain the paint. Some have burst into wonderful blooms that smile up at me with cheery friendliness, or nod brightly at my neighbor over the way, who revels in my bulb garden as much as I do.

First of all came my hyacinths, and what a merry touch they added to my rather dark north room, filling it with fragrance and bringing into it a bit of summer. Next came my tulips clothed in gorgeous attire, carrying me back in fancy to a garden by the sea where tradition relates they were first shown in America. This was in the year 1800, and the garden was located on the Cabot estate in Salem. Naturally these early tulips were imported from Holland, being brought over in the holds of the great ships that plied the sea in the days of New England's commercial prosperity. They took most kindly to their new home, and each year donned their rainbow gowns to delight the heart of the flower lover whose zeal imported them.

Darwin and Cottage tulips are conspicuous in my collection, and they are my favorites. They stand out so effectively and lend themselves to such gorgeous array. Odd shades are particularly plentiful in these and other varieties, such as blues, dark browns with red and blue base, satiny maroon, and loveliest of all, the violet-purple.

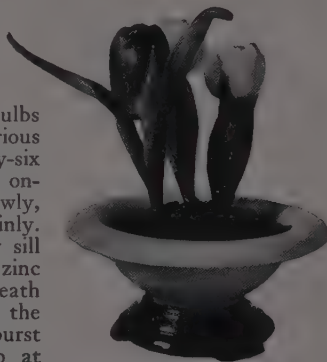
Last of all blossom my narcissii and jonquils, just in time to mingle their ivory and gold with the riotous beauty of my hyacinths and tulips. As I view the glorious ensemble, I admit I am perplexed to name my preference. Each one is precious, and each adds its bit of joy and fragrance. A preference almost seems a desecration in such an assemblage.

Unlike many popular things, bulbs deserve the favor they enjoy. Nothing else stands so daintily on our window sills, or peers out more coquettishly through partly drawn drapings. They show no partiality and only ask to lend their charm to emphasize the blendings of our color schemes.

So fill your winter garden with bulbs, and during the summer months add them in masses to your outdoor flower plots. There is no place in garden or house that they are not welcome, and in the long winter season, when your flower beds are laid waste, your bulb indoor garden will give the touch of springtime beauty that your snow-weary soul craves.



A white hyacinth shows off to excellent advantage in a light pink container



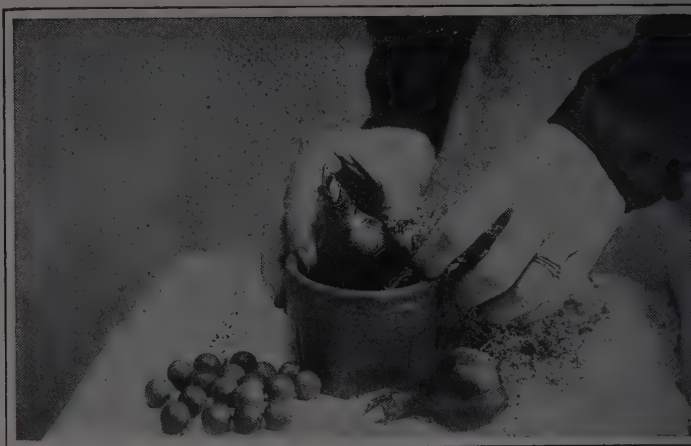
Red and cream tulips are charming in an old blue container that rests on a black stand



Red and white single tulips show off effectively in a gray container



A soft blue container decorated in flower design is the perfect complement to a pink hyacinth



A blue container for narcissus planted in earth. When the bulbs are set, a layer of dried moss or a decoration of varicolored marbles or shells adds a finishing touch



Sometimes one chooses simple earth for potting, in which event the planted bulb should be placed in a dark room at first so that the roots may become well set before it is placed in the light, unless the tips show yellow, when it should have the light at once



A double yellow daffodil set in a blue bowl. In the bottom of the bowl marbles rest on a dirt foundation, and on the marbles the bulb was placed, with water around it



A soft gray background with pink rose decorations constitute the coloring of this bulb bowl



*A BIT
of
JAPAN
in
AMERICA*

*Photographs by
EUGENE J. HALL*



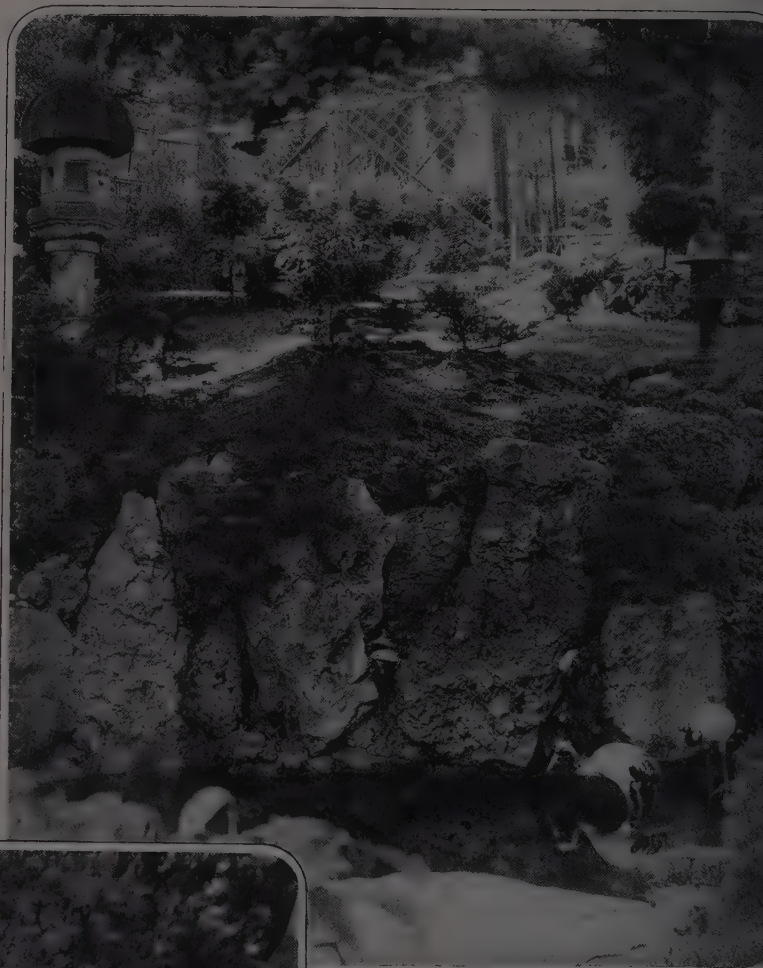
*The Garden
of
MILTON TOOTLE
ESQ.
Mackinac Island
Mich.*

In the Japanese garden, every object—tree, lantern, or what you will—not only has a deep esoteric meaning, but that meaning alters with the manner of the object's placement and its location. Consequently the whole atmosphere of the Japanese garden differs radically from that of any other type. This atmosphere the architect has achieved here to a remarkable degree





A tiny waterfall and pool surrounded by Liliputian evergreens, the whole guarded by sentinel forest trees



The rugged contours of Mackinac Island lend themselves well to the making of a Japanese garden, as evidenced in this glimpse of rocky pool, with lanterns and sunlit bamboo trellis in the background



The thatched entrance to the garden

Evergreens hold a high place in the symbolism of the East, being interpreted as the emblem of life in its perpetual or immortal phase; and in the true Japanese garden, stone lanterns are everywhere about it, for light is offering to the dead. Every lantern therefore is in a certain sense a shrine

NATIVE SHRUBS for SMALL GARDENS

By H. STUART ORTLOFF



HERE is, among present-day garden lovers, a growing appreciation of our native American shrubs for their pictorial effect in our gardens. Up to about fifteen years ago our list of available plants was restricted to those things which our early horticulturists brought from the Old World. These were, by the tried and true favorites—the deutzias, spireas, and others—things with which the early gardeners were familiar and which they could depend upon to adapt themselves to the new conditions of climate and soil. Fortunately there is on this list a number of American shrubs which had been imported to Europe and which have found great favor there. With these as a basis we have built up a much larger and more varied list of native plant material as the appreciation and demand for it has come into being. It is particularly fortunate that we have a rich and interesting collection of native plants to choose from, for with this wide variety we can give our gardens from that monotony and lack of appeal which has in the past so often characterized them. Many have tried to relieve this monotony by the use of a great number of varieties rather than by using large masses of a few species, but such a method does not result in a pleasing picture. Unity is almost entirely lacking; one of this, two of that, and three of another creates a hodge-podge and the effectiveness is lost. Practically all of the old

European favorites have much similarity in foliage texture and habit of growth, consequently their use in variety does not give sufficiently strong contrast, but merely tends to confuse. If, however, we are able to bring into our planting a new class of material in large enough masses, it will snap them out of their state of seeming indifference and lend to them a new zest and an added vigor by their very novelty, beauty, and effectiveness.

This growing appreciation of native material has not as yet become widespread enough to cause the nurseries to grow or collect many of the most desirable species. They will begin to do so only as the direct result of popular demand. Therefore in order that we may more



The shell-pink flowers of Southern azalea (*Azalea Vaseyi*) are exquisite against a background of green. It is native to the mountains of North Carolina but is adaptable to almost any situation.



One of the earliest of our native flowering shrubs or small trees—shadbush (*Amelanchier canadensis*)

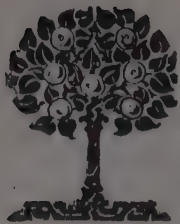
easily secure such things we must become thoroughly familiar with them and realize their great importance as possibilities. It is within the scope of this article to mention only a few of the less known varieties, but by calling attention to these few we may focus attention on all and so help to spread a feeling of interest and stimulate demand.

MOST native shrubs instead of demanding special soil or moisture conditions, are quite content with the same requirements which we have been in the habit of providing for our old-time favorites; in fact when brought under cultivation, even of the most casual sort, they become more beautiful and luxuriant than when left to nature's care. This is fortunate, for it makes it easily possible to bring into our gardens and borders things which we admire along the roadside, or in the woods and fields with little danger of their not surviving. Throughout the countryside plants abound in sufficiently large masses for us to bring them into our gardens in quantities consistent with the greatest effectiveness. This

collecting is also a most fascinating hobby, and one which may be pursued with pleasure and profit.

If we are so placed that our planting must be done under unusual conditions of shade, moisture, drought, or exposure to the sea, native plant material offers the ideal solution, for plants from an environment similar to the one in which we are to place them will thrive much better than those which have grown in entirely different surroundings. Then, too, we find that in arranging our different combinations of shrubs those which have been associated in the wild will combine to form more harmonious groups than those which do not grow naturally near each other, or under similar conditions. Not only do we find that their foliage and flowers blend in a pleasing way, but the fact that they have the same cultural requirements makes it easier for us to care for them. These are perhaps the strongest arguments for "planting in the vernacular," that is for using in our planting scheme mainly those things which are native to the particular locality, and introducing exotic things from other places purely for accent. If we do this we will achieve a unity and harmony of composition, both within our garden scheme itself and with the whole surrounding landscape, so that our finished work blends into the countryside rather than standing out conspicuously as a collection of plants dragged together from the four corners of the earth.

In creating early spring effects, native shrubs surely rival the best of the European importations. Hardly has the first warm day started the sap flowing when the spicebush sends forth its tiny blossoms to create a golden haze through our Eastern woodlands. From this time on there is never a moment when some one of our native shrubs is not showing us some beauty, either in flower or foliage. Familiar as we may be with the native azaleas we cannot too strongly emphasize the two gorgeous pink varieties whose lovely blooms follow close upon one another. With these as the outstanding features of the spring we can add many other things, such as the shadbush and the dwarf willows.



FOLLOWING upon the heels of resplendent June, many of our gardens greet us with a desolate hiatus of bloom. With the introduction of a few of our native plants this gap may be satisfactorily bridged until such time as the earliest of the fall colorings begin to show. Our high

bush blueberries with their great racemes of pink flowers producing white berries which slowly change to red and then to blue are most decorative. The shy little plant, New Jersey tea, peeping from under the edge of larger shrubs is also worthy of attention, as is also the midsummer blooming hardhack and its sister plant the meadow-sweet.

As cold weather approaches, when most of the old favorites have either dropped their leaves or turned to a sad and sickly brown, the native landscape begins to come into its own. For the gorgeous display of autumn our native shrubs are mainly responsible. To the rich foliage of the dogwoods, viburnums, and shrubby oaks are added the brilliant berries of aronia and black alder, the scarlet rose hips, and then when most of these glories have passed, the golden and orange blossoms of the witch-hazel shine from the thickets amidst the earliest snows, counterfeiting spring.

As though realizing the dreaded length of our northern winters our native shrubs present to us distinctive beauties. With clean growing and graceful habit, full of color, to serve as contrast to the somber hue of most of the European varieties, they offer opportunities for beautiful groupings against the snow. By combining the cheerful twigs of the silky dogwood and the high bush blueberry with the bronze foliage of the inkberry, laurel, and Oregon grape we can give to the winter landscape a warm note of color.

Following are a few varieties, a better knowledge of which will no doubt encourage their more frequent use in our shrub borders:

For spring

Southern azalea (*Azalea Vaseyi*). A graceful bush three to five feet high with exquisite shell-pink flowers in April or May. Native in the mountains of North Carolina. Thrives in cultivation and is adaptable to almost any situation.

Pinxter flower (*Azalea nudiflorum*). This is found in open woods and swampy places from Massachusetts to Florida and westward. It has an interesting loose and open habit and is covered with beautiful deep pink blossoms in May. Excellent for the border and edges of heavy mass plantings. Grows three to six feet in height.

Shadbush (*Amelanchier canadensis*). One of the earliest of our native flowering shrubs or small trees. The pretty racemes of white flowers appear in numerous quantities in late March or April before the leaves. This is a tall shrub, growing under cultivation to thirty feet. Irregular form. It is attractive at any age, but especially seen against a background of evergreen or in a tall border. Has interesting red berries in summer.

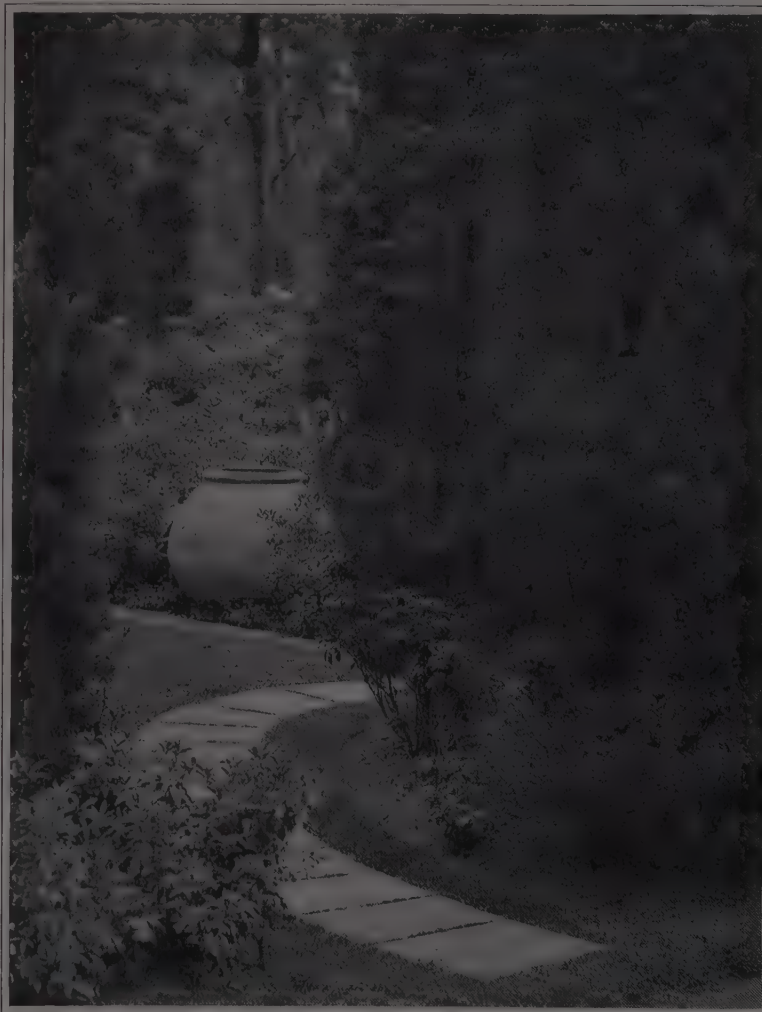
Spicebush (*Benzoin aestivale*). Found in moist woods and thickets from New England and the Middle West southward. Even before the alders shake out its curls this bush blossoms and fills the woods with light and fragrance. Foliage, which appears after the flowers, is good. Bright red berries in fall. Excellent for the border, screen planting, or woods. Grows three to eighteen feet.



Pussy willow (*Salix humilis*). A shrub three to nine feet in height with silvery gray catkins in early spring, and a dense gray-green foliage in summer. Found from Newfoundland and Minnesota southward to North Carolina in dry places and barrens. Denseness and quick growing qualities make it valuable for screen plantings, filler, and seashore planting. *Salix tristis* is a dwarf variety growing but eighteen inches high and much the same in appearance. It is found in the same localities as *humilis* but its size and habit make it valuable as a foreground shrub or edging down plant.

For summer—

Hardhack—steeple bush (*Spiraea tomentosa*). Bright spikes of pink or magenta, rarely white, flowers on erect and leafy stems, two to three feet high, from June to September. Is generally found in moist places



An effective placing of shrubs and evergreens at the entrance to Mrs. Harry Payne Whitney's studio garden

such as meadows and pasture land from Georgia northward and west. It is very ornamental and worthy of cultivation either in the flower garden or in the foreground of the shrub border.

Meadow sweet (*Spiraea salicifolia*). A near relative of the hardhack, but the flowers are white tinged with rose and appear in more rounded clusters which have an appearance of soft fleeciness. It blooms at the same time, has the same habits, and enjoys the same conditions as hardhack.

New Jersey tea (*Ceanothus americanus*). A shrub one to three feet high which is widely distributed from Canada to Florida. It forms dense masses, and has a profusion of white blossoms in July. Fine for light soils and may be used as an undergrowth in woodlands, or at the edges of shrub groups. Has persistent silver gray seed capsules which are interesting in winter, and the next season are among the new growth.

Flowering raspberry (*Rubus odoratus*). A very pretty shrub in cultivation with its handsome dark royal purple flowers in fragrant clusters appearing in early summer. Good foliage and a pleasing habit. Found from Georgia northward and westward in rocky places or on the borders of dry woods. It is best in partial shade.

Early wild rose (*Rosa blanda*). This leafy low bush, rarely over three feet in height, is found blooming in June and July in nearly every rocky place from New Jersey northward and to the west. Its five petaled flowers are

a beautiful pink, paling to white as they remain open, and are fragrant. Has a good foliage, and in the fall and winter gives a pleasing touch of color with its red hips.

Rosa lucida is a more dwarf variety seldom growing over eighteen inches. It thrives in light, dry, or rocky soils, and is wider distributed than *blanda*.

Swamp blueberry (*Vaccinium corymbosum*). A tall shrub five to ten feet in height which is easily grown in moist garden soils. It is native from Canada to Florida and prefers thickets or swampy places. Particularly valuable for its racemes of pink flowers which produce interesting colored fruits in late summer.

Edible. Its fall color of brilliant red and its interesting habit of growth make it a valuable addition to shrub groupings. Dislikes lime; excellent with rhododendrons and azaleas.

Sweet pepper bush (*Clethra alnifolia*). Growing three to eight feet high this shrub is found in large masses in swampy or low ground near the coast from Canada to Georgia. Its masses of fragrant white flowers in terminal clusters and its late blooming period (July and August) make it desirable for the garden border. Adapts itself to garden soil, moist or partially shaded places.

For fall—

Black alder or winterberry (*Ilex verticillata*). Usually grows a few feet high and is very noticeable in the fall because of its fine show of brilliant red berries. These are florists' substitute for holly, and have excellent keeping qualities when cut. Remain in place well into winter. Bush has good foliage.

Red chokeberry (*Pyrus or Arbutifolia brilliantissima*). A valuable low border shrub with masses of white flowers in May and June; dense, smooth, and shining foliage, enhanced with brilliant red berries in the fall. Found from Nova Scotia to Florida and westward.

Shining sumac (*Rhus copallina*). Grows three to five feet high and has a peculiar winged foliage which constantly changing its tint. Greenish white flowers in dense clusters and its red fruit along with its foliage make it the most attractive of a family. It is easy to grow and makes pleasing masses in the shrub border.

Witch-hazel (*Hamamelis virginiana*). A shrub six to twelve feet high with long, straggling stems and branches, well worth cultivation for its uniqueness throughout. Among the falling foliage its masses of orange yellow bloom is very striking. Grows in border but prefers damp or partially shaded places.

For winter—

Bayberry (*Myrica cerifera*). A much branched and compact shrub growing two to eight feet high and covered with a dense, leathery, deep green foliage. Found near the coast in poor soil from Nova Scotia to Florida. An excellent edging shrub for the border in summer, in winter its twigs are thickly covered with persistent gray-white berries.

Inkberry (*Ilex glabra*). A very pretty little evergreen shrub growing two to four feet and worthy of cultivation because of its neat shape and persistent green leaves. It is found from Massachusetts southward in sand and low places. Excellent for edging, evergreen plantings, and small informal hedges.

Oregon grape (*Mahonia repens*—*Berberis repens*). The native variety of the handsome Japanese variety. A creeping shrub only a few inches high which is found in the Rocky Mountains, and which is suitable for undergrowth or ground cover.

Silky cornel or dogwood (*Cornus Amomum*). Growing three to ten feet in height, with slender branches, good foliage, and in June flat clusters of white flowers which produce in September light blue-berries. During the winter the effect of the purplish branches and bright red shoots is pleasing.



*BLENDING an ESTATE
WITH the LANDSCAPE*



*RECLAIMED
from a
ROCKY BARREN
after
THIRTY YEARS'
CAREFUL
PLANTING*

*WYNDHAM
the ESTATE of
Miss ROSA ANN
GROSVENOR*



*At NEWPORT
R. I.
IS a TRIUMPH of
HOW an
UNPROMISING
LANDSCAPE
CAN BE USED to
BEST
ADVANTAGE*

The house is built of great blocks of rough hewn stone, which the passing years have almost completely enwrapped in ivy



In the shadow of the overhanging boulders below the house nestles a clear flowing spring, where the sheep gather to drink



The terrain is a series of rocky plateaus at varying levels, in the midst of which this charming lily-fringed pool seems as wild as though the hand of man had never labored over it



The greenhouse with its flag walk stands in a hollow below the commanding summit on which the house is situated



In developing Wyndham, Miss Grosvenor's main idea has been to maintain the note of rugged grandeur inherent in the site, but to soften it somewhat with careful planting. The blending of the house with the rocks, the relieving note of the foliage, and the introduction of the sheep into the picture, make an ensemble worthy of a Corot

The GARDEN *at* *CLIVEDEN*

Photographs



Lady Astor's own personal domain at Cliveden is an enclosed garden, with espalier fruit trees trained against its whitewashed walls. In the central beds grow white and yellow roses, the borders of lavender and deep purple pansies. The layout of the garden is shown above



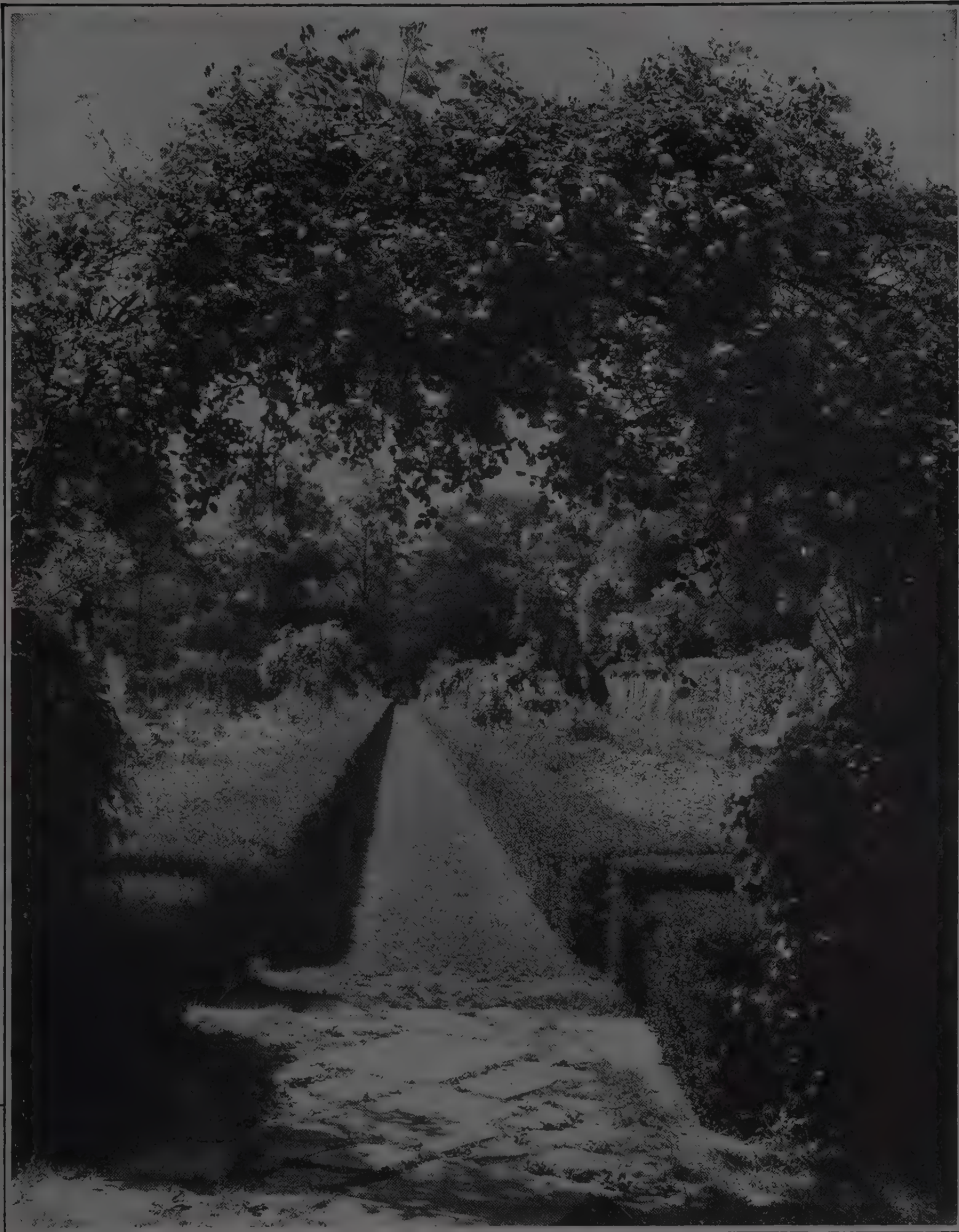
The graveyard in the grounds where are buried forty-two soldiers who died at Cliveden when it was used as a base hospital during the Great War. The gravestones lie even with the sward, and at one side a figure in bronze stands guard with outstretched arms

LADY ASTOR'S HOME in ENGLAND

HENDRICK V. DURTEA



Memorial (above) erected at Cliveden by Lord Astor in honor of the servants in his employ who lost their lives in the War. At the right, the rose-arched entrance to one of the long grass paths bordered with clipped box



A tennis court constitutes one end of Lady Astor's walled garden, separated from the rest of the garden by a flower border of pink snapdragons, pale pink and deep lavender stocks, and pale purple Allwoodii carnations. Beyond the tennis net, against the wall, is a broad band of coral-colored valerian

SUMMER INDOORS

By FLORENCE TAFT EATON

AT THE beginning of the shut-in season, lovers of home decoration experience a sharp change from the wealth of flowers and greenery always at command during the summer. Almost every one solves the problem by acquiring a few—or many—house plants, and arranging such seasonal decorations as taste dictates or the exchequer allows.

I have taken great pleasure in potting and bringing into the house—to bridge over the season before the first killing frost and the blooming of the permanent floral housemates—a few plants in full flower of such annuals as are suitable and can bear this severe transplantation. It is surprising how many sorts, if lifted and potted with care, will endure this entire change of environment and condition without even a dropped petal or yellow leaf.

Big, orange-studded African marigolds are among these. I have taken up stalwart specimens four feet tall, literally covered with buds and blossoms, and set them in a corner of my living room, where for six weeks they made a patch of golden light, glorifying the dullest day. Select big pots, put drainage in the bottom, pot carefully, give them lots of water, and the trick is done. French marigolds are just as amenable to transplantation, but are not so gorgeous. Double balsams, treated similarly, are favorite fall house plants of mine. Select symmetrical specimens of your favorite color, just coming into flower, pot carefully, and they are nearly as beautiful as azaleas—which they surprisingly resemble. Large marguerites in full flower are among the most satisfactory plants to lift and will bloom for a long time. Calendulas, petunias, and dwarf zinnias are all lovely. Of course these are all to be thrown away directly they become shabby.

When considering all-winter house plants I should always include two or three good-sized ferns, carefully selected according to personal preference. I always grow a specimen of the African fern. This flourishes luxuriantly, sending out new fronds continuously. Tiny plantlets, sprouting from the spores on the margins of some of the old fronds, are most interesting. A maidenhair—*adiantum*—is my own next choice, but there are numberless other beautiful and easily cared for varieties, the various "Bostons" and holly ferns among the best. A pot of grapefruit or date seedlings—six or seven together—is interesting to watch as the plantlets develop, and makes a very pretty table centrepiece. For the last two years I have very much enjoyed a pot of the moss-like lycopodium and have used it both as a living room decoration and as a dining table centrepiece. The mat of minute-leaved sprays entirely covers the outside of the pot as the season advances. A plant of sweet olive is sometimes hard to obtain, but becomes a cherished possession, the fruity, delicious odor of the whorls of perpetually appearing tiny blossoms perfuming a whole room. In the same category is the *Daphne odorata*. A plant of this may be enjoyed for years, and each winter every spray will develop a cluster of deliciously fragrant blossoms resembling those of the arbutus. Azaleas are most satisfactory if one has plenty of room. Although they have only seasonal bloom they develop very slowly, and a good-sized plant will produce blossoms for at least two or three months. Give azaleas lots of water. The Empress of India is, I think, my favorite for the house. In the summer sink the pots of all of the above "permanents" in the earth in a shady place in the garden, and keep them watered; do not be deluded by any directions as to their "drying off" to "rest." The azalea, especially, should have plenty of moisture,



A Christmas wreath for the front door, made of white pine, arborvitae, hemlock fringed with its tiny brown cones, wintergreen, sprigs of spruce and other evergreens, interspersed with sumac, bayberries, orange and red bittersweet berries, black alder, live-forever, and various cones



Sprays of evergreen with a few berries of black alder or bittersweet, tied with bright red ribbon, make a welcome change from the conventional small wreath for window decorations



Begonias of various sorts are among the best plants to include in window gardens or for general house decorations

ALL WINTER

Photographs by CHARLES DARLING

as it forms its buds during the summer. Begonias of different varieties make beautiful seasonal and permanent house plants. There are lots of lovely varieties, but none, to my mind, surpasses the Salmon Queen—one of the fibrous-rooted sorts—excepting perhaps, the Lorraine, which is in a wonderful class by itself. In caring for ferns and begonias treat them with great respect; it is fatal to their beauty to handle even slightly, the tips of the tender fronds and leaves. (All of the above, if kept from year to year, should be carefully repotted every fall.) Azaleas are an exception; they receive most of their nourishment from water and should very infrequently be disturbed. I kept a magnificent Empress of India in the same pot for six or seven years.)

AS TO the regular yearly house plants in window gardens or on stands, there are certain favorites usually included. Geraniums are first among these, and with reason. They are practically fool- and insect-proof, and, if previously managed rightly, will bloom continuously and abundantly through the entire winter. Be sure to select free-blooming varieties of harmonizing color. My first choice is the Dryden. This produces great numbers of splendid single blossoms of a particularly brilliant salmon-crimson color, shading to pure white in the centre. Double blossoms possess the valuable attribute of not dropping their petals. A close second to my much loved Dryden is Madame Landry, a very large double variety of a beautiful light salmon-pink color. White geraniums, both single and double, should always be included. The Louise T. Warren is the finest single white geranium I have ever seen, but is not now in the market. The Vernon begonia, of the valuable semperflorens class, is my favorite for window gardens, blooming continuously and freely. By including several pots (even four) and shifting their position as sunlight occasionally, these may be used for table centrepieces or in shady places. The blue streptosolen is one of my especially valued house plants. This bears a great abundance of sky-blue blossoms resembling those of the *Viole pedala*, which are especially lovely neighbors to the bright pink Vernons.

In such a short paper nothing remotely approximating a complete list of desirables can be attempted, but I should like to suggest seedlings of annuals to window gardeners. Nasturtium (select the running and twine them on trellises or around the windows), *Phlox Drummondii*, sweet alyssum, candytuft (giant), petunia, calendulas, and—especially enchanting—the lovely lavender-flowered giant schizanthus (poor man's orchid), all make delicate, effective, and altogether beautiful additions to window gardens and are easily raised and cared for. Seeds may be sown in pots in late summer, or self-sown seedlings may be carefully lifted.

I am very fond of all my house plants, but derive particular pleasure from those which are the by-product of country tramps and excursions. Tiny pine trees—one to two feet high, cedars and junipers of any preferred size, all make most attractive all-winter house decorations and may be set wherever desired, as they do not need sun. If potted carefully and watered often they will live and may be set out in the hot grounds later. These little trees will also most ornamentally fill outside window boxes after frost has killed the blossoming plants.

Potted Christmas fern (*Polystichum acrostichoides*) carefully treated, will stay green through the winter; but my favorite wild fern to bring inside is the common polypody. Pottery bowls



A moss garden will supply entertainment all winter. In it plant all sorts of tiny growing things, such as ferns, partridge berry vines, herb Robert, etc.



A Christmas basket filled with greenery, sumac, berries, etc., makes a charming centerpiece for the dining table during the holiday season, or for a small table in the living room

and with massed roots of this with— you like—partridge berry vines to edge the edges, make lovely house- plants. Try for artistic containers— necessarily expensive, but effective; those of green pottery are very attractive. Sprinkle all potted trees with ferns frequently. Ferns will live through the winter and tiny light green fronds will appear in the spring. Pots of the dark red pitcher plant (*Arisaema purpurea*), potted for the house, are both beautiful and interesting, either by themselves or massed set in moss gardens.

And this brings me to one of my favorite winter arrangements—moss gardens. I make these in ordinary flower-pot saucers, putting in first a layer of charcoal and covering it with leaf mold, in which I plant a variety of all the tiny, enchanting wild growths I can find—all ferns, partridge-berry vines, sprigs of pitcher plant, rattlesnake plantain, gold thread, sprigs of princess pine, etc., surrounding all with a covering of the earth with the most beautiful moss green moss I can find. All through the winter these moss gardens are a delight, for all sorts of minute growths constantly appear, and the varieties set flourish luxuriantly. Spray every day or two with a rubber bulb hand sprayer to keep the foliage valuable, by the way, for keeping the foliage of all sorts of house plants in good condition. Glass globes, filled with small wild growths, are particularly interesting, although more ornamental.

Always include gold thread moss; it flourishes wonderfully and blooms almost immediately. A sprig of arbutus will sometimes reward you with a delicate, fragrant pink blossom, and the berries of the partridge tree will double in size during the winter.

NO MATTER how freely we indulge in all-season decorative plants and plant arrangements, Christmas decorations transcend them all. What is more delightful than a family pre-Christmas excursion to evergreen-covered hillsides and woods, with the reward of bringing home basketfuls of greenery and other woodland treasures of which to construct our trailing festoons, bays, and wreaths?

If we are wise and forehanded, we have earlier obtained branches of bayberry, black alder, sprigs of pure white "everlasting," and ornamental holly, all of which have been dried and stored, and form a beautiful ad-



There is nothing lovelier than ferns for winter housemates, and they may be grown successfully in sunless windows or in shady corners. The bird's nest, Mexican, stag's foot, and a plummy variety of the Boston are the varieties here pictured

dition or contrast to the evergreens. Do not be discouraged, however, if this hasn't been accomplished; one of the most admired large door wreaths I ever constructed was a last-minute one. Various depressing conditions had eliminated plans for Christmas decorations; but happily custom and inherent Christmas sentiment was too strong, and a hurried trip afield resulted in obtaining plenty of evergreens, sprigs of sumac berries, feathery hemlock fringed with minute and beautiful cones, twigs of big cones from a pitch-pine

tree, big, knobby brown seed vessels of grass, and lovely clusters of brilliant red berries from my shrubbery. These, with hoarded sprigs of last year's bayberries, all combined into a really beautiful "welcome wreath"—which I have named the big wreaths we hang on the outside of the front door.

When making these large wreaths strive for loose but strong effective arrangement and great variety of material. Holly always, if available; black alder and other berry-bearing shrubs; bayberry; sprigs of hemlock with cones in abundance; sprays of the orange and red berries of the wild bittersweet—*Celastrus scandens*; white pine; arborvitae. White "everlasting," gathered in September, may be hung in the attic to dry, and is a beautiful addition. Baskets of graceful shape may be filled with the same varieties of greenery, cones, and berries; and, if not too large, make most beautiful and attractive holiday table centerpieces. I always arrange one for this purpose, or as an adornment for the living room. These baskets are also beautiful simply filled with sprigs of white pine and black alder, the latter heavily studded with its brilliant berries. Thickly fruited bayberry, massed by itself in an artistic container, makes one of the most effective of winter house decorations, and, on account of its non-fading and non-dust-showing qualities, is as beautiful at the end of the winter as when gathered.

When arranging these berry-studded branches of both alder and bayberry clip off all the leaves. Big bunches of barberries—both the native and Japanese—are very attractive in the house. These and the de-leaved sprays of black alder and the pine keep freshest in water if to be kept for a length of time; the barberry sends out numberless shoots of tender green new leaves toward spring.

In making wreaths for windows keep them small, otherwise they exclude too much light. Last year I experimented most successfully (lacking time and material for making window wreaths) with sprays of ribbon-tied arborvitae and red berries for each of my lower windows, and the idea received much favorable comment. Graceful, down-hanging sprays of the flat arborvitae, topped with a smaller sprig with which red berries were combined, tied at the juncture with a jolly red bow, produced a very gay and attractive effect.



Small trees—pines, slender cedars, or feathery junipers—planted in pots make attractive house decorations in winter



Looking across the lawn from the terrace back of the house. The land here drops into a ravine, which gives opportunity for lawns at different levels



View from the back of the house, across a corner of the sunken lawn to the flower garden with its pergola, of which a more intimate view is shown at the right

*JESSIE
WILLCOX SMITH*

*lives in this delightful
house and garden*

*At CHESTNUT HILL
PHILADELPHIA
PA.*

*EDMUND B. GILCHRIST
Architect*

*Photographs by
ROGER B. WHITMAN*

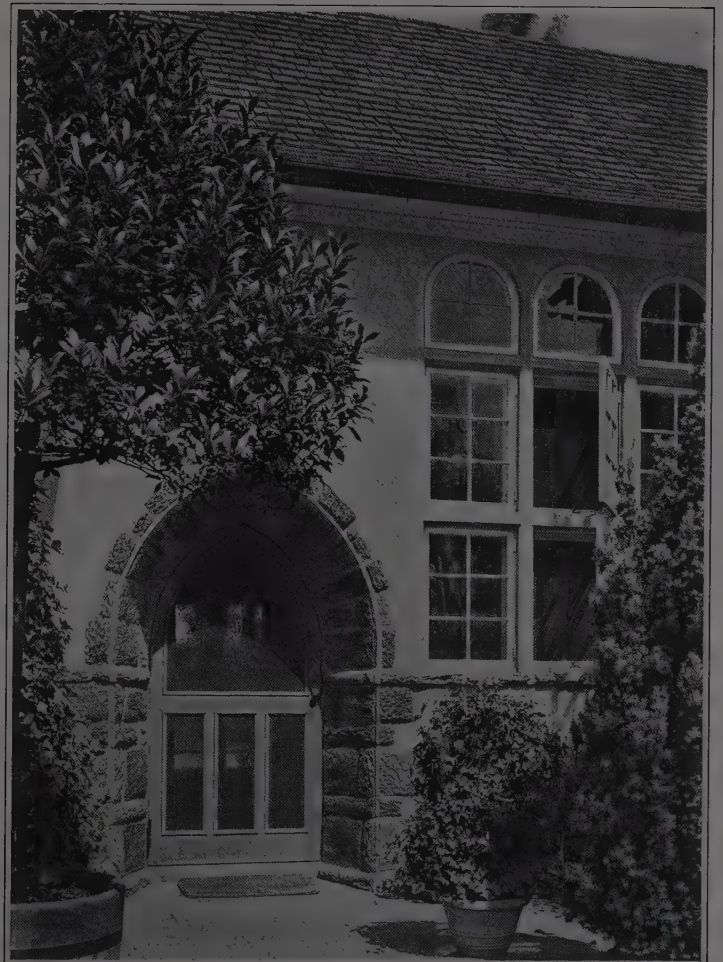




The distant wing of the house with the arched windows is a sun parlor and breakfast room, while the near one is Miss Smith's studio



Detail of side entrance to the living room



The front entrance is arched, the opening being outlined in stonework that contrasts effectively with the stucco of the walls



WONDER GARDENS of the CANADIAN WEST

By JULIA W. HENSHAW,
F. R. G. S., C. de G., etc.



Where is Heaven? Is it not
Just a friendly garden plot,
Walled with stone and roofed with sun,
Where the days pass one by one
Not too fast and not too slow,
Looking backward as they go
At the beauties left behind
To transport the pensive mind.

Does not Heaven begin that day
When the eager heart can say,
Surely God is in this place,
I have seen Him face to face
In the loveliness of flowers,
In the service of the showers,
And His voice has talked to me
In the sunlit apple tree.

—BLISS CARMAN.

CANADIAN gardens of the north, east, and south, each holds a particular charm. Up toward the Peace River grow prairie wild flowers which have broken over snake-fence and furrow in their mad May riot 'round the board-and-batten shacks of pioneer farmers; the pleasure grounds of Ontario and Quebec produce stately cannas, gorgeous geraniums, and tawny-striped salpiglossis; while the more homely plots of Nova Scotia and New Brunswick are ablaze with poppies, pinks, and pansies.

Along the southern frontier of the Dominion, cactus (*Opuntia polyacantha*) and silvery sage-brush (*Artemisia tridentata*) dispute the right of high-bred mariposa lilies (*Calochortus macrocarpus*), juniper,

and silkweed (*Asclepias speciosa*) to a place in the sun; but when you cross the Rocky Mountains and go down to the Pacific Ocean, a new world lies at your feet, for here the alchemy of civilization

has transmuted the wilderness into fields of flowering fruit-plant, and you find the wild nine-bark (*Physocarpus opulifolius*), bunchberry (*Cornus canadensis*), heart-of-the-earth (*Brunella vulgaris*), and calypso growing in amity with the "tame" geum, mallows, stocks, nasturtiums, and primulas of the self-respecting garden.

The inland parts of the province possess gardens of a more or less general character and luxuriant growth—grassy lawns shaded with poplar, pine, and spruce, all trees indigenous to the territory, mingled with the introduced copper beech, variegated maple, and mountain ash, and edged with flower beds containing a wide selection of annual and perennial plants; but as you leave behind you the districts watered by such mighty streams as the Columbia, Kootenay, Thompson, and Fraser rivers with all their glowing wealth of fruit ranch, farm, and stock range, and reach the Pacific Coast, you enter upon a region where the magic of gardens lays a spell upon your soul.

Gardens full of roses
And peonies a-blow
In the dewy morning,
Row on stately row,
Spreading their gay patterns,
Crimson, pied, and cream,
Like some gorgeous fresco
Or an Eastern dream.



One of the pools in Mrs. Butchart's garden at Benvenuto, on Vancouver Island—a paradise for rock and water plants

Thus writes Bliss Car-
n, the Canadian singer
of outdoor songs, and
only he must have
known the above lines
when wandering in some
garden on the outskirts
of Vancouver—the gar-
den of Langravine—the
place of its name redolent
of the days when swash-
buckling Spaniards sailed
the coast of '49, its rose-
garden radiant with Testout,
General McArthur, and
American Beauty,
fringed by a fern-fringed
stream whose waters, spread
beneath low-hanging
boughs, are margined by
loving plants, buck-
le (Menyanthes tri-
color), musk (Mimulus
noides), spring beauty



The garden at Killcare, the home of Mrs. R. Macdonald, Caulfeild, B. C.

are battalioned behind
the low-growing phalanx
of antirrhinum, nemesia,
godetia, lantana, statice,
and a hundred other
lovely brilliant-hued blos-
soms.

Within a radius of five
miles of the city of Van-
couver you will find rock-
gardens offering edel-
weiss, armeria, dianthus,
thalictrum, aubretia,
silene, campanula, hy-
pericum, cistus, lithos-
permum, jasion, ane-
mone, draba, heuchera,
arabis—in fact alpine
from all parts of the up-
flung world; wall and
water gardens with their
treasure of sedum and
saxifraga, heracleum,
lysichitum, and poly-



In a quaint old English garden at
Victoria, B. C., where the yew trees—

(*Claytonia parvifolia*), and frit-
illary (*Fritillaria lanceolata*).

The garden of Shannon is an
example of stately pleasure
grounds planned to lead one on a
pilgrimage by straight stone-
flagged walks between formal
rose-beds to a summerhouse half
hidden under masses of Ameri-
can pillar bloom, down winding
paths past parrot-green tennis
lawns, lily-gemmed ponds, and
lavender plots to a balus-
traded terrace, from which the
outlook to the Fraser River
across acres blazoned with the
scarlet insignia of the vine maple
(*Acer circinatum*) is enchanting.
Vast plantings of flowering
shrubs and foreign trees flank
wide parterres of color, where
groups of buddleia, helenium,
pentstemon, lavatera, and phlox

gonum; herb-gardens where
rosemary, thyme, basil, and
balm, marjoram, hyssop, savory,
catmint, and rue flourish; in
short all kinds of cultivation
marks the site where in 1885
an impenetrable forest was
overlord.

Iris gardens are few in num-
ber along the British Columbian
coast, but one I know that is a
joy to all beholders. Composed
chiefly of *Iris Kämpferi* in tints
ranging from cream-white to
Burgundy-red through all the
gradations of lilac, mauve, and
violet, it is set in a natural
rock-basin in the garden at
Killcare, Caulfeild. This gar-
den slopes down over the cliffs
to the great sea "mystic and
musical," and shows the loving
care of skilled hands, for out



—have been trimmed in the
shape of animal and other figures



Another view of trimmed yew trees in the old English garden at Victoria





A mirror for the flowers—another of the numerous charming water features in the Butchart garden

of wild lands the owners have evolved a spot quite charming and individual. You will find there anemones opening their soft-lashed eyes, and dogtooth violets (erythronium) yellow, white, and rose, shyly growing among blue sea holly (*Eryngium planum*), Peruvian lilies (alstroemeria), golden sunset (rudbeckia) and forget-me-nots (myosotis).

FAR out from the busy city of Vancouver, on cliffs that rise in broken terraces from the ocean's rim, backed by the buttresses of mighty mountains and treed with gigantic Douglas fir, 100 to 200 feet high, red-boled arbutus and moon-flowered dogwood, lies my own beloved garden, wrought out of the primeval by the toil of man—and woman—and the gracious alchemy of the sun. Flights of steps made with stones split off from the granitoid rocks, dry walls built across clefts in the escarpments, the pockets thus constructed being filled with earth carried in buckets from an adjoining soil patch, and then planted with gay flowers; stone seats and flagged courts all made of rock-slabs, the mosaic widely put together to give the pavement-plants room to spread—the stone-work done by a man whose race built the Great Wall of China—these are characteristic of a true British Columbian garden. What days of patient toil went to make this wilderness bloom with purple and rose—days stretching over a period of ten years from the time when we first tackled the problem of clearing the sub-tropical jungle eight feet high, composed of raspberry and blueberry, sallal and capberry, ferns, fallen logs, and Titanic tree-stumps, all of which had to be hewn away to give breathing space to the flowers. Out of three acres of land, which slopes now gently, now in abrupt rocky declivities from a height of

200 feet down to tide-water, we possess only one acre that is arable, the rest of our demesne presenting a vista of huge hewn rocks covered partly with six-inch-deep moss, and partly with a very thin layer of soil, only just sufficient to support the natural growth of sallal, the Indian name for *Gaultheria shallon*. It took but a couple of years in that area of virgin soil to make the garden bud and blow where the tangle of undergrowth formerly reigned, and to-day standard, bush, and climbing roses, masses of introduced sweet William, columbine, salvia, candytuft, campanula, Canterbury bell, bugloss, monkshood, lupin, rose campion, and carnation bloom luxuriantly side by side with the wild wake-rob (Trillium grandiflorum), golden aster (*Grindelia integrifolia*), black star-flower (*Brodiaea grandiflora*), garlic (*Allium cernuum*), bearberry (*Arctostaphylos Uva-ursi*), wild lobelia (*Collinsia parviflora*), sea purslane (*Falerianella congesta*) and false Solomon's seal (*Smilacina racemosa*) we have preserved on the estate.

Paths cut through the sallal closely resemble the laurel-bordered walks of England, though the western lanes are better brightened by the polished foliage and clustered pinkish blossoms of the *Gaultheria*.

The arbutus (*A. Menziesii*) belongs to the West alone. The tree, so picturesque with its ruddy satin-smooth limbs, glossy leaves, and compound panicles of myrrh-scented buds, has often been the salvation of men lost in the depths of the British Columbian forest, for as the bark on the main trunk always peels from west to east, it is easy to determine one's direction when neither sun nor compass is available.

ANOTHER tree particularly our own is the western dogwood (*Cornus Nuttallii*) standing from thirty to eighty feet high, a prince of Cornaceæ. Fully to appreciate it you must walk in a British Columbian forest or garden at the close of day (for the glorious tree grows wild on the mountainsides as well as under cultivation) and watch the flowers break into a shining sea of bloom at the touch of the silver moon, while the white-petaled ox-eye daisies surge about your feet, and the scent of night-blooming stock (*Matthiola bicornis*) is lifted up like incense on the evening air.

Truly, The Hut, set in its colorful semi-wild garden, was like a benediction when war came to devastate the world, and between the years of foreign service we snatched brief periods of rest in this little bungalow builded of fir and cedar on the parent rock and surrounded by the perfect peace of the hills. To come from shattered France and war-racked Britain, from work past human



A corner in the rock garden of Mrs. Henry Croft, at Victoria, B. C.

ing, and suffering past human bearing, the cool quietude of our western garden, s to sit in the seat of Archangels under the Tree of Heaven.

THE herb-garden of lovely lavender and mints, sages and bergamot, reaches perfection at Benvenuto near Victoria, on Vancouver Island, where an old disused quarry has been metamorphosed into a spot of magical beauty by the genius of Mrs. R. P. Butchart. From the sunken pleasure grounds of Pasadena to the Biblical gardens of England, I know not one to compare with this concealed paradise dropped down between high cliffs—a little walled-world filled with the music of fast-running waters. To describe such a spot would tax the poetic fancy of a Wordsworth and the prolific pen of a Scott, but I could fail to delight in the rich intoxication of its perfume and rainbow tints—array of saffron and gladness of gold, pomegranate and purple that pales to pink, jacinth- and peacock-blue powdered with pearl, amethyst, azure, and emerald-green; silver and sapphire, topaz and rose, coral and carmine, cerulean and mauve; carnation, beryl, jonquil, and flame, turquoise and porphyry, orange and grape—the head swims and the senses reel; it is the alchemy of the gods whereby begonia and sunflower, dahlia and phlox; sweet pea and daphne, azalea and rose; cyclamen, scabious, veronica, vetch; cornflower, larkspur, nemophila, cress; tall amaryllis, petunias and pinks, pale celosias, blue cinerarias, zinnias and violas, foxgloves and flax; bleeding-heart and love-in-a-mist, sun-drenched and clove-scented, all are brocaded into an exquisite arras; and when as we drink deep of the perfumed air, and march on through spring's burgeoning and summer's fulfillment to meet the "warrior autumn" all clad in crimson and chrome, we learn the secret of the garden, and bow our heads in humbleness beneath the lances of the rain.

In another Victoria garden we find gladiolus and gaillardia, helen-

ium, geum, marigold, anthemis, goldenrod, arnica, coreopsis, and cinquefoil. True, such resplendant outpouring of molten and minted gold heralds the decline of summer, especially when medal-lioned with garnet asters and ruby chrysanthemums; but how lovely the passing of the year—Nature puts on no coat of sorrow in the time of her fruition, but triumphant in burning splendor she answers the trumpet-call of the East Wind, scattering largess of ripe seeds as she marches out into the azure of autumn with all her scarlet banners unfurled.

AT GOVERNMENT HOUSE in Victoria the gardens cling to the face of the steep hills fronting on the sea, and overtopping the stone ledges spread out into lawn and parterre, broken here and there with picturesque outcroppings of parent rock and, centering round a summer house built entirely of Douglas fir logs. This summerhouse is unique, and a delight to the eyes as well as a pleasant refuge from sun or rain; the glass doors can be opened or shut at will, and with its hanging baskets of trailing fuchsias and gay annuals, Philippine furniture, and cool-colored matting, it affords an equally charming breakfast or afternoon-tea room. The pool filled with pink and white water-lilies, the beds of massed nemesias, low-growing phlox, stocks, verbenas, and clarkias, sentineled by the tall poppy-like romneya, immense spikes of yellow verbascum, tall, mauve-tasseled thalictrum, and stately crimson hollyhocks, and the fascinating rock-garden filled with trailing roses and alpines, and shielded from cold winds by bushes of sweet-scented Spanish broom, each and all contribute their share to the guerdon of the garden.

Where all is so lovely, how describe, discriminate, or descant? "I know"—not "a bank"—but a hundred "banks whereon" flowers of rainbow hues abound. Let the traveler come and seek out this western land for himself—then, like the men of old who went to spy out the Land of Canaan, he will return to his own country laden with the knowledge of its beauty, for "surely it floweth with milk and honey," and its fruits are as the fruits of Eshcol.



The garden at Shannon, the home of Mrs. B. T. Rogers, Vancouver



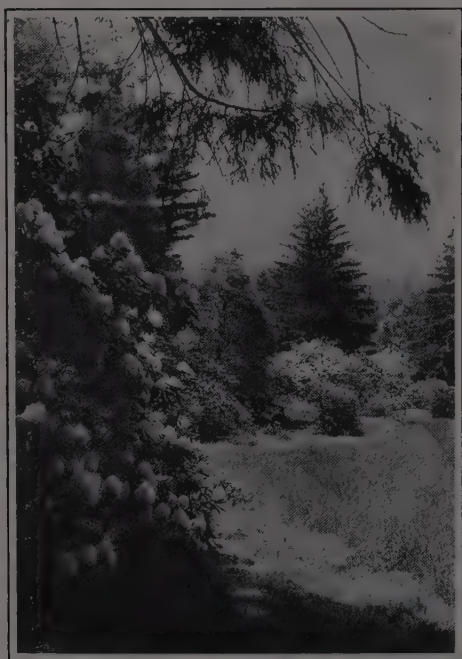
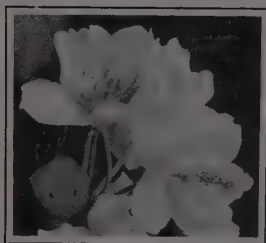
A view in Mrs. F. B. Pemberton's garden, Victoria



JUNE TIME is RHODODENDRON TIME

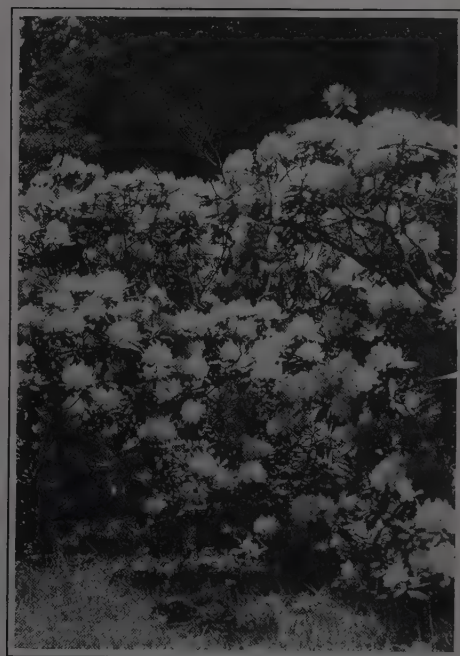
Photographs

This charming old estate at Peekskill, N. Y., was laid out and planted some forty years ago by Moses J. Beach and his wife, and is to-day owned by their daughters, the Misses Beach and Mrs. Abbott H. Thayer. The planting consisted principally of specimen trees and flowering shrubs, now at full maturity. Of



ON THE
 EACH ESTATE
 at
 PEEKSKILL, N. Y.
 ROGER B. WHITMAN

these the rhododendrons have made the most luxuriant growth—many of the trunks are six inches in diameter and the clumps twelve feet in height. Their June pageant, with the great billows of bloom—white, red, purples, and pinks—is worth going far to see. The pictures give only a faint suggestion of the actuality



TWO GOOD EXAMPLES of



An airplane view showing the house, garden, and surrounding grounds belonging to Mr. Henry Rogers Winthrop, Woodbury, Long Island. The dogwood tree having a spread of thirty feet is the outstanding feature of the formal garden. All the other planting was arranged to emphasize the beauty of this tree, which is planted in the center of the side farthest from the house in a series of circles framed in by a hemlock hedge. The groups of tall, thin cedars planted in the four sections around the pool force the vista to the dogwood.



ISABELLA PENDLETON

Although the garden design is formal, the planting purposely deviates somewhat in order to avoid too-rigid lines. An irregular wisteria bends over the pool, tall flowers grow inside an evergreen planting of yew and prostrate juniper, and low edging plants such as veronica, rupestris, helianthemum, and hypericum, encroach on the brick paths.

GARDEN DESIGN and PLANTING



From the garden doorway of this house a hornbeam arch frames a delightful view down the long grass walk to the hand wrought iron gate, beyond which lies an open space. The turf steps join a walled garden on the upper level, with the spring garden. From the centre four paths radiate to other flowering nooks.



Landscape Architect

The informal planting gives this formal garden a misty softness. In the background Japanese cherry and *Ilex verticillata* are interspersed with tall white cedars. Deep blue anchusa, salmon-colored azaleas, and bronze, yellow, orange, and purple breeder tulips bloom behind an edging of low boxwood and mugho pine.



PLANT YOUR BULBS in the FALL for SPRING

By H. STUART ORTLOFF



Tulips of the tall varieties are especially effective planted where their blossoms are reflected in water

WHEN the soft wind of early spring fills the air with that faint, almost imperceptible, odor which fires our blood and makes us feel that winter has at last relinquished his hold, we are thrilled to see the bulbs breaking through the ground, and we rejoice as their buds swell and open into masses of gorgeous color. How poverty stricken is the person who has not had the forethought and good taste to include a few choice bulbs in his planting list. How great his disappointment must be when he sees the drifts of lovely color in his neighbor's garden while his own is stark under the warm spring sun. Then it is too late to mourn his loss, so it is far better to stop now, at this early time, and consider well the requirements of the garden for early spring bloom.

There are almost countless varieties of bulbs to choose from, and, for the uninitiated, the task seems well nigh hopeless. Perhaps the most helpful suggestion that can be made is to use the process of elimination. Decide where you wish to plant, the garden beds with their more formal arrangement, or the shrub beds and perennial borders with their informal treatment considered. This point established we may turn our attention to the time of bloom of various varieties so that we can have a gradual procession of color rather than a few disjointed and hectic flushes. Then comes the question of suitable color schemes. This is a difficulty, unless we are blessed with an accurate eye for color, for there are so many hues, tones, and shades to take into consideration.

But if one does not possess a true color sense, then it is far better to rely on solid color masses or to use a few of the established combinations which have been worked out with success by others, unless, of course, one wishes to call in expert advice on the subject.

Each spring marks an advance in the newer idea of bulb planting. There are still many lamentable instances, however, where the old idea that bulbs are bedding material and must be used as such still lingers. Well may we be thankful that the day of "artistic" flowerbeds has passed and we can, in view of recent developments, be hopeful that the future of bulb planting will see more attention given to informal groups and tasteful color combinations rather than to the stiff beds and ribbons of bloom which

marked the extent of garden progress some years ago. The best way to secure this advance is to bring to the attention of bulb lovers the more modern method of planting which is used most successfully by experts of plant arrangement.

This method considers bulbs as paints on a palette, and by viewing our garden and lawn from the various angles from which we are accustomed to see them we paint in our mind's eye a

pleasing picture somewhat after this fashion; yonder group of evergreens will act as an admirable foil for a group of brilliant scarlet tulips or, perhaps, as the distance from the house is so great, a mass of white ones will serve better; in the shaded space under the trees a touch of color will not be amiss, so we will plan for a group of brilliant pink or gorgeous yellow; then the spaces in the garden which are nearer to the house and usually in full sunlight will be excellent if filled with combinations of the delicate pastel shaded tulips; and so on until we have covered in detail each spot of our garden, and then we turn to our catalogue and look for the variety which will best fill our requirements. How much more sensible is such a method than to tear off the wrapper of said catalogue, feverishly seize a pencil, and list each sensation without rhyme or reason, so many square feet to fill and so many bulbs per square foot required.

Our choice of narcissus or crocus is easy compared with the tulips, for there are not so many varieties nor so many combinations of color. But there is such a host of tulips—where to begin? Proper selection will, however, give us more pleasure and a longer period of bloom. The single early tulips belong to the latter part of April and have a charm all their own. These are the varieties which have enjoyed for a long time a high place as pleasing bits of conventional decoration, and have been used as bedding material, for they make such exquisite combinations and have that formal note which is needed in formal spaces. The best results, no doubt, are secured when we use them in masses of single colors, for it is easily possible to achieve crude and glaring combinations of color. But harmonious effects can be achieved if care is exercised, and instance a few possibilities:

The large and beautiful vivid Pink Beauty intermingled with White Beauty, which is perhaps the finest of all bedding tulips. Le Reve with its soft blending of rose and buff



Marian C. Coffin, landscape architect

A tulip planting on the H. G. Haskell place at Wilmington, Del. This is a narrow strip of ground, but its manner of planting suggests spaciousness

Charles Wellford Leavitt, landscape engineer

makes a pleasing combination with the graceful White Swan.

Goldfinch, a pure yellow tulip which has a long period of bloom, will light up wonderfully when placed with some white tulip such as White Swan or White Beauty.

The enormous carmine tulip Proserpine makes a pleasing effect when intermingled with the delightful pink of Princess Juliana. The brilliant vermilion-scarlet of Brilliant Star goes well with the large, pure yellow blooms of Golden Queen.

Single early tulips should be planted from five to six inches apart and about as deep. They grow ten to fifteen inches high, and one must be careful not to place them behind the taller growing varieties or back of husky perennials. Many will find delight in working out combinations of color, using tulips and other various flowering plants, as for example:

The striking purple violet of Globe de Rigaud and the many pale yellow and white spring flowers such as golden alyssum and rock cress. The deep pink tone of Flamingo is set off to advantage among the gray leaves and white flowers of cerastium and arabis. Purple pansies enrich the warm red of Couleur Cardinal with its plum color on the outer petals. White Swan and some clear yellow such as Mon Tresor are charming near wisteria. Golden Queen, Prince of Austria, or Van Der Noor are all enriched when combined with the blue of forget-me-nots.

The double early tulips are also effective, if one enjoys double flowers. While they are not as graceful and are apt to be the sport of each spring, which seems to take delight in breaking off

and house decoration make them deserving of a permanent place in the beds and borders of our gardens. They are most pleasing when planted in bold masses or large groups. Place them at least five inches apart, so that each bulb may have room to develop its individual beauty and grace, and plant them about as deep in the soil so that they may become vigorous and strong. They do not grow as tall as the Darwins and are pleasing placed in front of them, for their colors

exquisite silvery heliotrope shaded Fairy Queen is another charming grouping.

The rose-colored Pluto with its violet lights is pleasing with the rosy lilac and silvery gray of Doris when the lovely pointed white Picotee with its carmine edges is interplanted.

Vitellina, creamy white and of sweet scent, is extremely beautiful when used to set off the soft rose color of Mrs. Kerrell.



Tulips with interplanting of other flowers. The garden of Mrs. F. E. Tallman, Wilmington



For achieving delightful color effects in the garden, no flower of its season excels the tulip

bending over the heavy flower heads, they serve to fill in the gap between the early single tulips and the later varieties.

While the early tulips are pleasing, and we are grateful for their early appearance, it is the cottage tulips which are members of the true aristocracy in tulip world. Their long, slender blooms, the segments of which are usually narrow, pointed, and mostly reflex, are borne on graceful stems sometimes two feet in height. These beautifully formed flowers lend an air of informality to garden beds and borders, while their long range of color, from glistening white through blush and pink to rose-scarlet and vermilion, and on to orange and tawny hues, lend spots of vivid color to the spring garden. These excellent qualities and the fact that they are admirable for cutting

are clearer and make fine contrasts with the more subdued glory of their taller relatives.

Practically all of this variety go well in combination, the colors blending themselves, but it is possible to work out combinations of your own if you prefer. For instance:

The long and fine oval-shaped Moonlight, with its pale yellow, the soft tone of violet found in Twilight, and the golden yellow of Bouton d'Or with its black anthers are excellent, especially when underplanted with blue forget-me-nots, which bring out the yellow admirably.

The delightful creamy white of *Elegans alba*, the fine oval-shaped Solferina with its yellow paler than Moonlight, interplanted with the

THE Darwins, the tall-growing monarchs of the springtime, are distinguished for their beautiful blending of several shades which are nearly related, rose, lilac, lavender, heliotrope, gray-violet, and scarlet being predominant. The great enthusiasm for these beauties is not a fad or fancy but is due to an awakened appreciation of their glory. The rich, bright-colored blooms are borne on strong gigantic stems from two to three feet high. For the border among other hardy flowers, in more formal array with the cottage varieties, for more isolated groups in the shrub border or against evergreens, or for combinations of delicate colors in the flower garden, the Darwins are unrivaled. There are a few good white varieties, but no clear yellow; this color will have to be supplied by a cottage variety.

Darwins are effective in any combination, but as a guide we suggest a few possible groupings:

Crepuscle with its lilac color flushed with rose, the lovely pink of Clara Butt, and the very pale pink of Margaret.

Euterpe with silvery lilac and rosy tones combines well with the lovely flushed L'Engueue.

The exceedingly beautiful Yolanda pink with buff base, the exquisite mauve of Rev. Ewbank, the rich velvety blackish maroon of the darkest of all tulips, La Tulipe Noire, and the bright rose-colored *Baronne de la Tonnaye*.

The desirable warm claret-colored Sir Trevor Lawrence with its smoky colorings intermingle well with the pale pink of Margaret. Petrus Hondius with its brilliant carmine-rose and blue base, the velvety blackness of Philippe de Communes, and the pure pink of Clara Butt.

The pure tones of lavender in Melicotte and the pale yellow of the cottage tulip Moonlight is pleasing, especially among gray leaved plants such as cerastium.

Blue Celeste with its violet-blue flower is charming near clear pink toned tulips such as the lovely pointed and satiny pink Flamingo.

Darwins are very effective among the taller perennials of the flower border and in the fore-

ground of shrubs, for instance the several following combinations will be found pleasing:—

Anton Roozen or Edmee near wisteria.
 Baronne de la Tonnaye or Margaret near forget-me-nots.
 Carl Becker with lavender cotton.
 Clara Butt or *La Fiancee* in front of purple barberry.
 Dream under judas trees.
 Erguste is excellent with blue flax.
 Faust among dicentra.
 Glow among lavender pansies.
 Europe underplanted with *Nepeta Mussini*.
 Euterpe with *Stachys lanata*.
 Palisa among purple iris.
 The Bishop with yellow pansies.
 Princess Elizabeth or Spring Beauty in front of the evergreens.
 Princess Juliana in front of blue spruce.
 Valentin among yellow iris.

of pale purple; and the purple flushed with rosy bronze changing to pure orange at the edges of Cardinal Manning.

The dark, dull bluish violet of Louis XIV and the light bronze yellow of Yellow Perfection.

The reddish mahogany, with bronze shadings of Fairy, and the dark purple of Newton.

The dark brown margined with light brown yellow of Lord Cochrane; the beautiful dark brown shaded old rose of Heloise; and the silvery flecked with maroon crimson of La Siquiliere.

THE best time to plant tulips is in October or early November. Little is gained by an earlier planting, for while it is true that the bulbs will keep better in the ground, we should plan so as to have only sufficient root growth in the fall to insure a prompt and early start in spring. Plant-

bulbs are dug up. This is not a just criticism for after the bulbs have finished blooming and have died down for their summer rest it is possible to plant shallow rooted annuals such as sweet alyssum, pansies, nasturtiums, asters, and a host of other things over the sleeping bulbs. In fact there are many shallow rooted annuals and perennials which if used as an under planting for the bulbs will lend their colored flowers and foliage pleasing combinations with the tulips themselves for instance the thymes (*Thymus Serpyllum lanuginosus* and *T. Serpyllum coccineus*), the sedums (*Sedum glaucum*, *S. anglicum*, and *S. album*), and the veronicas (*Veronica patens* and *V. prostrata*) are especially adaptable for the smaller bulbs. While pleasing combinations of creeping phlox, rock cress, cerastium, forget-me-nots, flax (*Linum perenne*), *Nepeta Mussini*, violas (pansies), thyme, *Stachys lanata*, and several of the hardy garden pinks with their gray-green foliage can be achieved by planting various harmonizing tulips near them.



Another view in the Haskell garden at Wilmington

It is impossible to describe adequately the Breeder tulips. The immense flower heads are borne on stiff stems sometimes forty inches in height, and are of pleasing Rembrandtesque tones. It is, no doubt, because of these deep colorings and artistic blendings that these tulips have come to be the most sought after; for they offer the largest possibilities for the garden enthusiast who is seeking rare colors and combinations. The Breeders bloom at the same time as the Darwins, and their shades of bronze, buff, and brown are excellent contrasting notes for the light and bright colors of the Darwins. Some suggested combinations are as follows:

Marechal Victor with its clear blue flower with a brown border and yellow base; Golden Bronze with its light brown yellow and deep chrome yellow base; and the light yellow flamed with purple of Old Times.
 Goldfinch, a golden chestnut with an interior of mahogany brown; Jaune d'oeuf with its bright, deep chrome yellow and slight flush

ing may be postponed until just before frost sets in.

In planting bulbs in large masses or in the more formal arrangements of beds and edgings, where it is important that they all bloom at the same time, it is necessary that they be planted at a uniform depth, but in the more informal plantings in the perennial and shrub border we do not have to be concerned about this.

After planting it is wise to cover with a coarse mulch of leaves, straw, straw and manure, or any litter in order that if there are any unseasonable warm spells during the winter the bulbs will not feel the direct effect of it and begin to come up. But it is very important that this mulch be applied *after* the ground has frozen, otherwise the field mice are apt to burrow into it for winter quarters, and enjoy the bulbs as winter food. If the ground is frozen they are unable to get down to the bulbs to do damage.

Often have we heard the criticism that the planting of bulbs necessitates bare spaces in the front of the garden beds all summer, unless the

such as mauve tulips with blue flax, purple ones with *Stachys lanata*, pink ones with *Nepeta Mussini*, etc. Another means of securing a pleasing spring garden picture is by planting spring blooming material along the shrubbery border, and garden edges where tulips are to be grown. Lilac, laburnums, magnolias, spireas, forsythia, and the flowering peach, apple, and plum trees are all very effective.

Now just a word to remind readers that the care of tulips after blooming is very important if you want them to give us an abundant supply of bloom next season, but it is also very simple care. Many old gardeners have the idea that the only way is to lift each bulb carefully and dry it in a cool, shaded place, then lay it carefully away until the fall planting time. We all know that the bulb will keep better in the ground, but in order that it may cure slowly and well, one must not cut off the top after it has done blooming until it begins to wither away. Then cut it off close to the ground and forget it. Never allow a tulip to seed itself, for seeding takes away its strength.



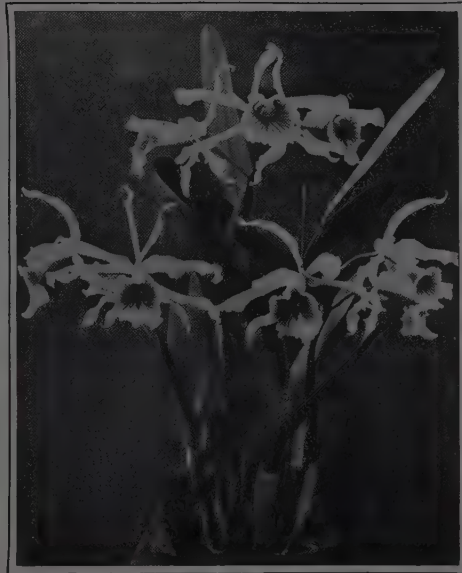
Lelia purpurata, a southern Brazilian orchid, after having been hybridized. Note the seed pod forming in the stem next to the flower

THE WAY OF AN ORCHID

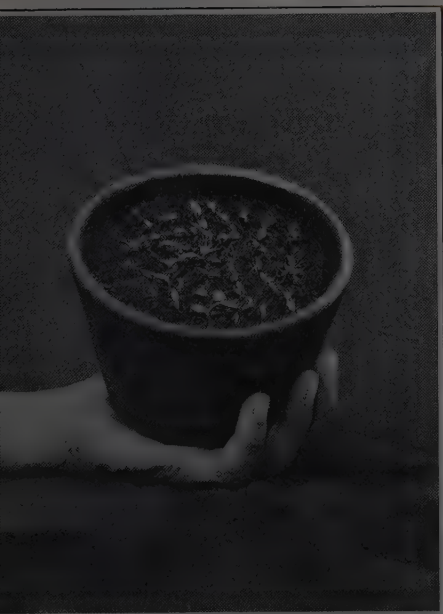
Photographs by
BLANCHE M. OSBORNE



The same plant photographed a year after the picture on the left was taken, showing the fully formed seed pod



Detail of seed pod, and at the right the plant in full bloom. *Lelia purpurata* in its native habitat blossoms in spring and early summer and is an unusually robust and beautiful species



The orchid seedlings one year after planting



Two years after planting they look like this

A NEW WORLD HOUSE in an OLD WORLD GARDEN

By R. CLIPSTON STURGIS

Photographs by BURR A. CHURCH

ABOUT 1690 some unknown settler built himself a house on the shores of Sagamore Creek, just outside Portsmouth, N. H., and near New Castle, the island in the Piscataqua which was settled earlier than Portsmouth. The house was of the simple type common on the New England coast—a great chimney stack in the centre with the kitchen fireplace and its oven, and two other fireplaces, in the living room, and in the small room off it, probably a bedroom. A shed supplemented the kitchen as a scullery, and upstairs under the low-pitched roof were two more bedrooms. The stud was very low, a little over seven feet downstairs, and a little under seven in the highest part of the rooms upstairs.

No one seems to know anything of the early builder and owner, but the cottage took its name from the Martines some time late in the eighteenth century, when French refugees came to this country. The Martines were still living here when Louis Phillipe was in this country and he visited them. Whether they returned to France with the return to power of Louis Phillipe one does not know, but during the nineteenth century a Catholic priest lived here for many years, and his waier iron is in the house now. Though the Martines and the priest loved and cared for the place, others who succeeded them did not, and

when it passed into its present owner's hands it was desolate and neglected.

The house was dirty inside, and unpainted outside, and only the great lilacs and the pink and white hawthorn trees bore witness to the loving care of earlier owners. The lilacs are remarkable as probably the oldest in the country, or of the same age as those at the Governor Wentworth house, which is situated further toward the junction of the creek with the river. The early part of the Wentworth house is of the same date as the Martine house, but the large rooms were added by Governor Wentworth in the middle of the eighteenth century, and the lilacs standing by the later entrance may have been planted then. There is no record of lilacs in this country before 1730.

When the Martine cottage came into my hands in 1890, the fireplaces had been bricked up to get the more effective heat of modern stoves. These were opened and the cellar and foundations improved. The house was too small even for my small family, so the scullery was removed, and in place of it a wing was built, with kitchen, offices, and servants' rooms.

The changes in the house, however, are of no importance as compared with the gradual development of the gardens. This was begun on the southeast, facing the creek. The great white lilacs and the red and white hawthorns stood



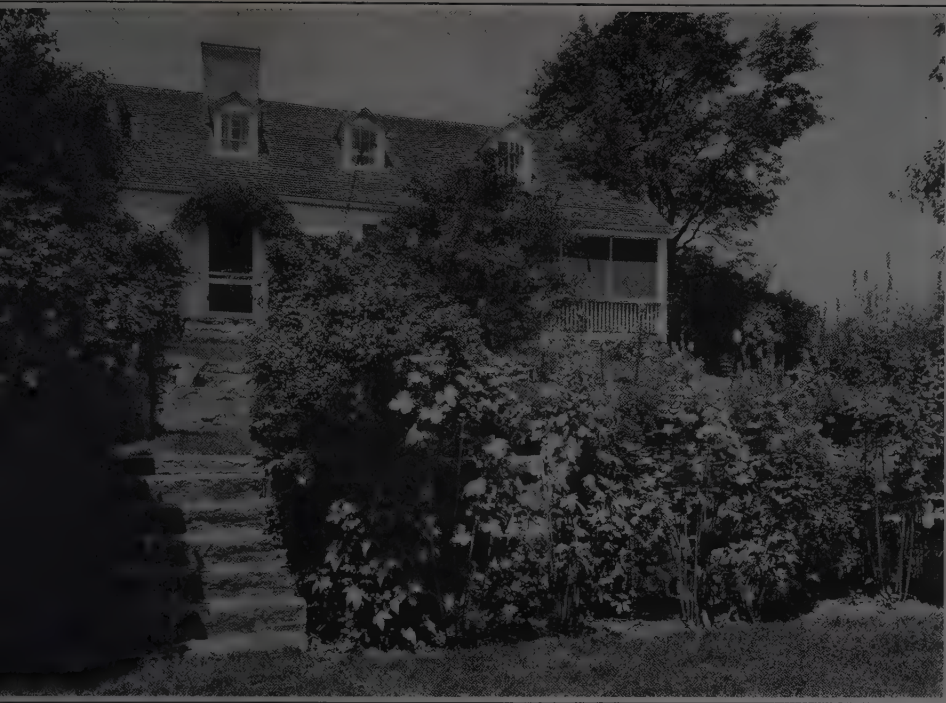
The house, originally of the simple type common on the New England coast, was judiciously improved by elongating the main house and adding a wing at the back



The removal of the partition between the living room and the small room adjoining it provided the living room with two fireplaces, one around the corner from the other—a unique but attractive arrangement



One of the quaint bedrooms. The ceiling is less than seven feet at the highest point, but the sloping side walls are broken by dormers, so that the rooms are light and airy

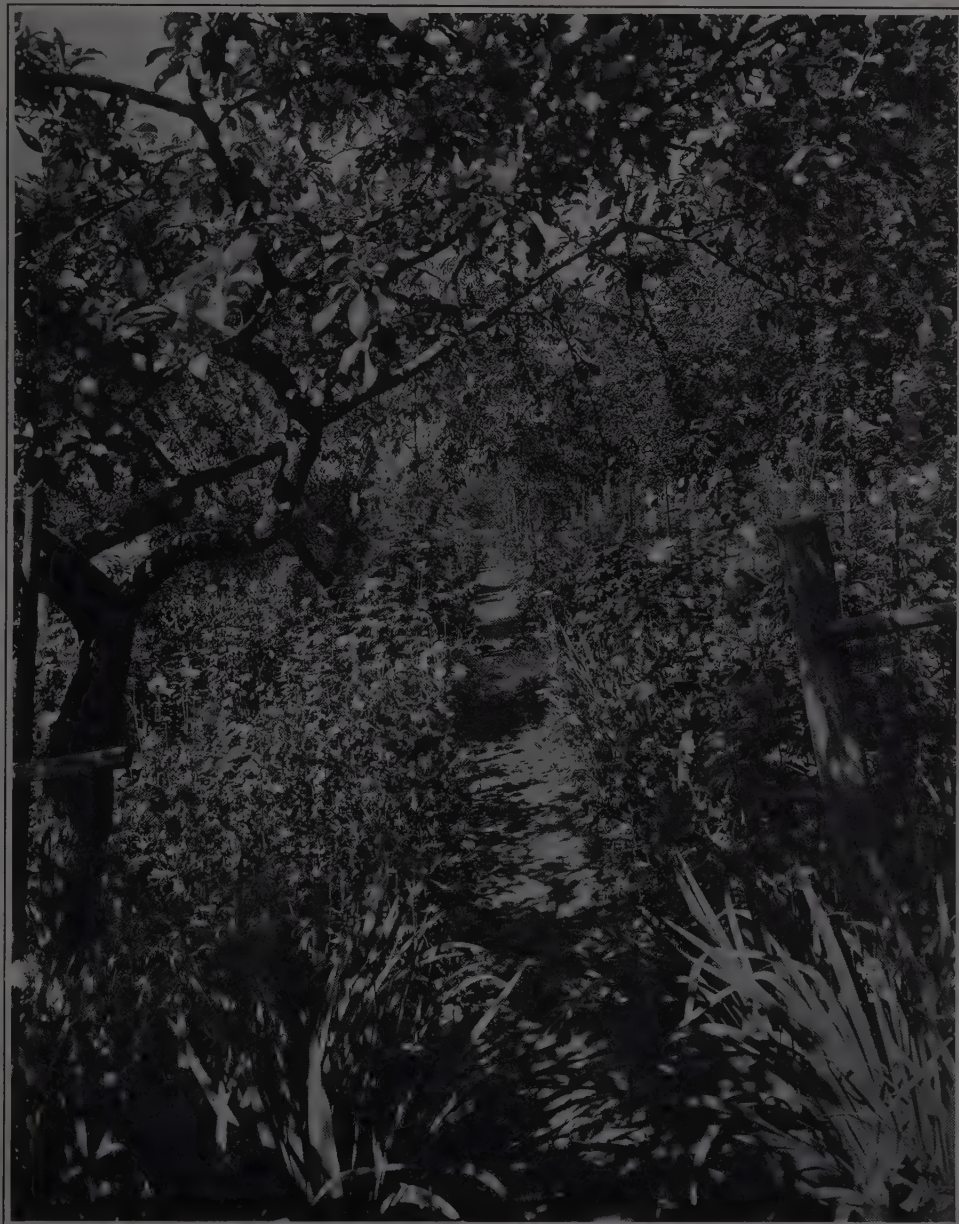


Stone steps lead from terrace to terrace

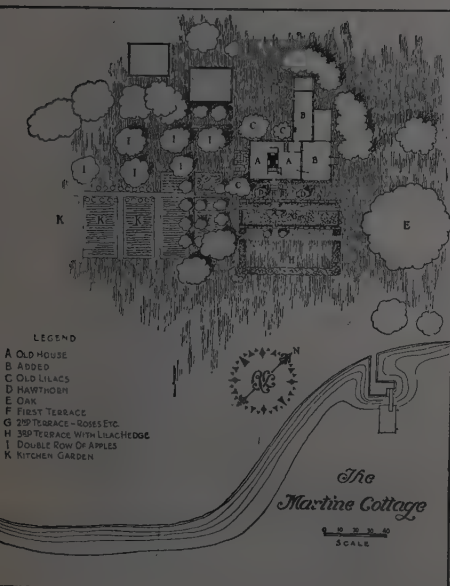
ere on a sloping bank. This was leveled against retaining wall and formed the first terrace. Then a second terrace was built with another retaining wall, and enclosed with a box hedge. Then a paved terrace was made on the southwest, with stones taken from the yard of another old house in Portsmouth, and this is now covered with wisteria and clematis. Then a third terrace was formed and this was banked on the edges and enclosed with a lilac hedge, the old plants of which came from the Wentworth house. Then ground was cleared for a tennis court. This hedge, planted twenty years ago, is five feet thick and seven feet high. Finally, and this is now in process of development, the gardens on the slope to the southwest were developed. Peaches, plums, pears, and cherries, young apples and the old trees, give profusion of bloom and fruit. Strawberries, raspberries, and currants are the smaller fruits, and vegetables and flowers, in ordered beds, complete the general plan. One flower bed in early July is all larkspur and lilies.

ONE cannot but feel that the old house must rejoice in the care that is now expended on all that surrounds it, and the gardens look as if they belonged to the house, and must always have

been a part of it. All good gardens are a gradual development, and the best gardens are those that have grown under the direction of one who really loves them. English gardens owe their charm to the fact that they express the sentiment and taste of the owners who, in successive generations, have planned and planted them. If the gardens of the Martine cottage have any charm it is due to the fact that they have been planted and tended with loving care. Things that were done wrong the first time (and there were many) have been done again. Last year the upper garden had become hopelessly overgrown with perennials, among which New England asters had made themselves abominably conspicuous, and rocket had filled nearly all the space not occupied by the asters. So everything came up—asters, rockets, and peonies left for good, and were planted where they could grow as freely as they pleased. Larkspur, foxglove, columbines, and sweet William were put on the edges, and the larger beds were divided with paths, stone edged. The rose bed had become choked with English violets, which were planted a few years ago in much doubt as to whether they would survive the winters here. They did, and spread until nothing near them had a chance. They also were removed, and placed under the hawthorns. Before they were taken up they had the foresight to scatter seed everywhere, and they came up this spring so thick that cultivator and fingers are still working to get them out.



One of the delightful paths through the garden



Much of the extra stock went out to the new southwest gardens, and one larkspur, transplanted last autumn, so appreciated the change that it is now over seven feet tall and in full bloom. For the first time we have annuals, and the terrace garden has the annual larkspur, petunias, pansies, dianthus, verbenas, snapdragon, and Canterbury bells, and these should be in full bloom when most of the perennials have gone by. Then comes the autumn with the fruits.

One hardly knows when the garden is most interesting and it is charming even when it is covered and its outline hidden in banks of snow.



The house from the lower terrace, and (below) a reverse of the view, showing the river and gardens from the house



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